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## ABSTRACT

The report covers evaluation activities of Audio-Read Systems during the final year of the Maryland Career Development Project, a project which provided several programs or activities of an exemplary nature designed to facilitate career development. Its objectives were to help students: (1) develop a positive self-concept and greater self-understanding; (2) learn about and understand the range of educational and career opportunities; (3) develop and use the decision-making process more effectively; (4) make smoother transitions at key points in their career lives. The report focuses on three components of the project (elementary, junior high, and senior high school) and is organized by sections in each of which a project goal, method planned for achieving it, and expected results are presented. The evaluation procedure, data, results and discussion pertaining to that goal are then presented. Elementary teachers and program planners may find the 74 pages of appendixes of special value, for they include program descriptions, transcripts of elementary school observations, elementary teacher progress reports, and instruments used in the evaluation at primary and intermediate levels. (Instruments used to survey workshop participants are included in the text.) (Author/AJ)

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VOLUME II

Evaluation Report

Project Number O-361-0021

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The Maryland Career Development  
Project

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U.S. Department of Health,  
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E001 110

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FINAL REPORT

Third Year Evaluation of the  
Maryland Career Development Project

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The Maryland State Department of Education

13 July 1973

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## PREFACE

In June 1970, the Maryland Career Development Project began operation under funding from the U.S. Office of Education (Contract No. OEC-0-70-5186 (361)), under the provisions of Part D (Exemplary Programs) of the Vocational Education Amendments of 1968. In conformance with the regulations associated with such projects, the Maryland Career Development Project set up an evaluation program utilizing third party evaluators. Evaluations were carried out during the first two years of the project by Dr. Walter S. Mietus, Mr. Chris Stilling, and Mr. Ted Glenn whose reports covering the first two years of the project have been previously submitted (August 1971 and August 1972). In November of 1972, a contract was awarded to Audio-Read Systems, Inc., Silver Spring, Maryland, to carry out an evaluation study on the third and final year of the project. With minor exceptions, this evaluation was to focus on three remaining components of the program, centered in Baltimore City, and to concentrate on developments occurring during the third and final year.

This report is the Fourth Quarterly, and Final, Report covering the evaluation activities carried out by Audio-Read Systems during the third and final year of the Maryland Career Development Project.

Audio-Read Systems wishes to express its gratitude to the many persons of the Baltimore Schools and the Maryland State Department of Education who kindly extended their help and cooperation during the course of this study.

## EXECUTIVE SUMMARY

### Third Year Evaluation Report Maryland Career Development Project

The evaluation was carried out by Audio-Read Systems, Inc., according to an approved Plan based upon a series of goals set forth by the Project Staff. E's first translated these goals into an approved set of procedures and data to be collected. The evaluation focused upon three components of the Project centered in the Baltimore City Schools: Elementary Component, Junior High School Component, and Senior High School Component. Some attention was also given to the other components and the prior years of the Project. The major results of the evaluation are summarized below:

#### Elementary Component

A "Program Description" was developed, based upon documents, observations, and interviews, to describe the "process" employed by the Project to achieve its goals. Subsequent observations and interviews indicated that the Project was proceeding essentially as planned. The two planned workshops to develop "leadership skills" in career education were held as planned and were well received by the attending teachers. Plans and activities developed by the teachers at these workshops were found to be included in their classroom activities, as intended. Some of the evaluation activities proposed by the Project Staff in connection with these workshops were not carried out.

The Project intended to improve the self awareness and career awareness of the students. Data collected by the E's indicated that substantial progress was made toward these goals, at least in selected instances, even though administrative difficulties within the school system essentially invalidated the pretest-posttest design planned by the E's.

Finally, as planned by the Project Staff, a resource guide for career awareness programs was developed, based largely on the contributions of the teachers during the course of the workshops. While this guide has much useful potential, it lacks some of the planned sections, transitional material, and an efficient organization for general usage.

The E's concluded that the major goals of the elementary component had been essentially met, and that a major result of the Project effort had been a sensitization of the school community to career education and a greatly increased emphasis which would undoubtedly have significant impact on students.

#### Junior High School Component

The Project Staff had planned to develop a "Career Exploration Model" drawing upon a number of prior and ongoing efforts in career education in Baltimore. It did so. However, the model lacked a certain coherence, continuity, and theoretical framework, and was somewhat fragmented due to its dependence upon its various component origins. In addition, it was not field tested as planned, except for one brief tryout of a small portion of its contents. A base of philosophy and goals was developed, however.

A "Program Description" was prepared for the Cooperative Work Experience Program portion of this component which consisted of a special academic program combined with on-the-job experience for about 70 "high risk" students at two junior high schools. About 10 students dropped the program for various reasons. The remaining students continued the trend from last year toward decreasing absences, but no impact on achievement could be determined from the crude grade data available. Employers rated the students attitudes between "Fair" and "Good". One school did better than the other, probably because of the better background of the students or because its students were all 9th graders, though it did have somewhat more meaningful jobs for its students. All jobs were at somewhat low job skill levels, but provided significant employability skill development.

As promised, the Project Staff created 43 teaching/learning packages to go with the work experience program. However, these did not appear to have been based upon an overall plan, and only one package was briefly tried out. Reactions to these packages have been favorable; however, further tryout and possible revision was recommended by the E's.

The scheduled in-service program for junior high school counselors was successfully conducted and well-received by the participants.

Again, the E's concluded that the Project Staff had essentially met the goals which they had set forth, though considerable work remains to be done before the dissemination and extension of these activities and products to other schools in the system.

### The Senior High Component

The Project Staff had proposed to establish a prototype Occupational Information Center at Southern High School, which they did. A "Program Description" was developed to describe this component. The Center was organized around the VIEW system, incorporating a microfilm reader and printer. Although the Center was established, and the equipment installed in a number of other schools, equipment difficulties continued to be a problem. Data collection also indicated that only a small fraction of the student body voluntarily used the system, though they indicated essential satisfaction with it. Only 12 occupation cards were added to the file of 72 occupation cards during the course of the year. Few if any outsiders visited the Center to see the system. Thus, although the Center was established, many of the expectations for it were not realized.

The Project Staff had planned in-service training for selected teachers of Southern High orienting them to career education and to its implications for the teaching of this subject matter areas. This was not done. Instead, two addresses on career education and the teacher's responsibilities were given by a University of Maryland professor. In the E's opinion, this did not meet the goal originally specified.

The E's concluded that this component has made the least progress of the three, and that serious attention must be given to both the equipment and the contents of the system before further dissemination of the system is attempted.

### Summary

In general, it was concluded that the Maryland Career Development Project had succeeded in attaining the large majority of its goals, and that it had created a favorable climate for, and an emphasis on, career education which should have great impact on the school community. A number of specific recommendations were offered. These included the need for better organization and lines of communication in the administration of the project and the use of resources; more explication of functional and behavioral objectives and criterion behaviors; further development of the products of the Project; systematic planning and coordination including evaluation, tryouts, and feedback; and greater participation of active teachers in the planning, evaluation, and in-service processes.

Taken constructively, the E's feel that these recommendations will support and enhance the further development of career education in Baltimore which seems strongly indicated.

## I. BACKGROUND

This section of our report deals with the general structure of the Maryland Career Development Project; a synopsis of the evaluation plan which was devised by Audio Read Systems, Inc. (ARS) to evaluate the third year activities of this project; and a discussion of the context in which the evaluation was conducted, including the constraints and compromises which developed in carrying out the approved plan:

### A. Background of the Career Development Project

It is not our intention here to summarize the rationale and reasoning behind the activities of the Maryland Career Development Project, but rather to present for the interested reader a summary of the Baltimore components of the project which formed the subject of the evaluation effort.

This summary is based upon two sources. The first is the description of the components as found in the operating documents and plans prepared by the Project Staff. The second is the distillation of the findings of the evaluation team, based upon direct observations and upon interviews with the persons coordinating the program. Descriptions of the three Baltimore components are to be found in Appendix A under the title of Component Program Descriptions. The following materials summarize the general structure of the Maryland Career Development Project as derived from the plans and operating procedures transmitted to the evaluation team by the project staff.

The Maryland Career Development Project provided several programs or activities of an exemplary nature which were designed to facilitate the process of career development, by accomplishing or demonstrating one or more of the following broad objectives:

- o To help individuals develop a positive self-concept and a greater degree of self-understanding.
- o To help students learn about and understand the range of educational and career opportunities presently available and that are likely to be available in the future.
- o To help students develop and use the decision-making process more effectively.

- o To help individuals make smoother transitions at key points during their career-life, such as the transition from school to further training or to work.

To achieve these broad goals, The Maryland Career Development Project set up a series of activities to:

1. Provide a resource person in career development to work with the teachers and counselors in eight elementary schools in Baltimore City and devise procedures, programs, and materials which would:
  - a. Help youngsters learn more about themselves and see themselves positively.
  - b. Help youngsters learn more about the world of work and to relate this knowledge to their work in school.
2. Develop a workshop for teams of junior high school counselors, teachers, administrators, and specialists in which they could learn about the concept of career development, and work together in planning career exploration programs for their own schools.
3. Develop a comprehensive information system which would utilize various media, along with computer and microfilm technology in making available various kinds of information about education, training, and employment opportunities. This system should strengthen the existing placement process, thereby enabling students to make a smoother transition from school to the world of work or further education or training.
4. Work with neighborhood employers and community agencies in developing a work-oriented program for drop-out prone students. The program would be designed to set up interaction between students, the school, and the community in such a way that students learn a variety of skills related to employability and people in the community learn more about the school's programs.
5. Produce a television series of approximately fourteen thirty minute programs which will be oriented towards students in grades 4-8. The primary purpose of the series was to facilitate the career exploration process.
6. Develop a State career development resource notebook for educators.
7. Conduct a state-wide conference devoted to the concept of career development, its objectives and programs.

To achieve the above goals seven major components or action projects were designed each with a set of terminal objectives which were to be implemented.

The discrete major components were:

1. Junior High School Component
2. Elementary School Component
3. Computer Interactive Learning System (Information and Placement System) Component
4. Work Advocate Component
5. Instructional Television Series Component
6. Career Development Notebook
7. State Wide Dissemination Conference

The multiple objectives of the components were analyzed for congruency with the stated terminal objectives of the proposal and conditions expected and set forth by the U.S. Office of Education. The third party evaluation team did recognize the objectives of the components and the planned strategies of implementation to be appropriate. Appropriateness was determined by interacting with all staff leaders of the components, reviewing implementation activities and alternate strategies for achieving the goals.

The present report is concerned with the activities of the new third party evaluation and with components 1, 2, and 3 above. These three (Baltimore City) components are elaborated below.

1. The Elementary Career Development Resource Component

The objective of this component is to provide a resource teacher and a paraprofessional to work with the teachers and counselors in eight elementary schools and to devise procedures, programs and materials which will

- a. help youngsters learn more about themselves and see themselves positively, and
- b. help youngsters learn more about the world of work and the relationship of education to it.

The resource teacher and her assistant have achieved this objective through several kinds of activities. The resource teacher has worked with city-wide curriculum committees and curriculum specialists in order to incorporate information about the world of work and career education into the existing curriculum. In addition, the resource teacher has conducted faculty meetings and inservice programs in order to inform the faculties in eight participating schools of the concept of career development and its implications for education. Finally, the resource teacher, has developed and demonstrated a variety of materials and techniques such as simulated work tasks, gaming procedures, the

effective use of community resources and field trips, and the utilization of parents and community members as work-role models.

## 2. The Junior High Work-Oriented (Cooperative) Component

The objective of this component is to provide training in employability skills to 65 students in two junior high school settings (General Henry Lee and Rock Glen Junior High Schools). Private employers and small businessmen were recruited for the purpose of providing training in employability skills and in attitude development. The employers were paid a set amount per hour for this training. They, in turn, returned their training allowance to the students in the form of a reward system as the students developed the required employability skills. The interaction between school personnel and businessmen in the community has been of interest.

## 3. Information and Placement System Component

The objective of the Information and Placement System Component is to provide students with up-to-date, reliable, and accurate information about career and educational opportunities, thereby increasing the effectiveness of the existing placement system in Baltimore City. The information dissemination vehicle consisted originally of a computerized element. However, at the request of the U.S. Office of Education, this was changed to a microfilm system, commonly known as VIEW.

## B. Discussion of the Evaluation Plan

The third party evaluation was to be concerned with all three of the above described components. The E's assumed the responsibility for developing the Evaluation Plan from the objectives for each component, and carrying it out. They assumed however no responsibility for other evaluative activities in progress or planned, other than as advisers.

The details of the project and the requirements for the evaluation were discussed by representatives of ARS, the Maryland State Department of Education, and the City of Baltimore at a series of meetings beginning on 8 August 1972 (notably 23 September and 6 October), and resulted in the submission of an Evaluation Plan on 10 October. This Plan reflected ARS's best understanding of the requirements of the project at that time and was revised on 1 November to reflect certain changes requested by the U.S. Office of Education. This Plan was incorporated into the Contract. The final contract was received by ARS on 11 November 1972, at which time the evaluation effort actually began. This was a

later beginning than had been anticipated, and placed the development of baseline measures and data under pressure.

The Evaluation Plan called for a basic design comprised of a pre-post study combined with processed monitoring. It specified an evaluation which would develop a comprehensive assessment of present status with respect to the explicit objectives of each component and the treatments being employed; reassess the treatment process; and perform an end-of-year assessment to determine the effects of the treatments in the attainment of the objectives. The final report was to record the procedures and results of the evaluation and to present interpretive results, recommendations and conclusions, and the data analyses supporting them. Control groups were to be used only where possible to set up meaningful controls on important sources of variation.

As a further definition of the focus of evaluation, the Evaluation Plan stated "the evaluation by the third party is to be focused explicitly on the objectives agreed upon previously by the project representatives and the U.S. Office of Education... it is assumed that the third party evaluators will be expert in evaluation methodology. As such they would not be asked to evaluate the components and materials from the point of view of subject matter experts (e.g., the merits of the content of the training materials). Such review should be conducted by other subject matter consultants." The Plan then proceeded to detail the objectives as they were at that time stated by the project.

Finally, the Plan stated a series of tasks to be performed in the conduct of the evaluation:

1. Restatement of objectives. E's would restate the objectives given to them by the project staff in a form which would provide a basis for the design of instrumentation and a definition of data to be collected.
2. Collection of baseline data. This task contemplated the early collection of data in each of the areas in which such collection was indicated to serve as a baseline for the comparison with end-of-year results.
3. Process documentation. In order to determine changes in the planning, development and execution of any of the components, detailed interviews were suggested as a basis for comparing actual implementation with the planned treatments.
4. End-of-year measures. These measures would be developed to assess treatment results; this would include the collection of interview, questionnaire, and record data in April/May 1973.

5. Data analysis. The data would be analyzed, and suitable comparisons and descriptive statistics would be computed.

6. Reports. Finally a schedule of reports was presented.

C. Implementation of the Evaluation Plan

Before describing the results of the evaluation, it is necessary to describe some of the constraints under which the evaluation took place. It should first be noted that ARS believes that the Evaluation Plan as presented and approved by all concerned was a realistic design capable of providing useful information about the project. It had been developed in full awareness of the potential problems associated with evaluation work in the public school setting. Unfortunately, serious compromises with the design had to be made during the course of the study. These resulted from a series of inter-related difficulties.

The initial problem was that the evaluation project was already six weeks behind schedule when final approvals to begin were obtained. As a result, efforts to develop instrumentation and make arrangements for the baseline data collection were impaired. However, ARS produced a restatement of objectives and defined the data to be gathered in a document which was submitted on 14 November 1972. This document became the subject of considerable discussion and was approved by all parties at that time. It called for a definition of career awareness and self-awareness to be supplied by project staff and key instrumentation to be developed and applied to baseline data collection before the Christmas Holidays. Unfortunately, this goal was not achieved, and in fact some of the "baseline" data was actually not made available to the E's until April and May of 1973.

Much of the difficulty which occasioned these considerable delays was a function of two factors. The first was the fact that E's were constrained from making direct contact with the schools and school personnel except through certain project staff as intermediaries. As a consequence, the ability of the E's to establish an efficient data collection schedule was seriously impaired. Secondly, a great many other activities officially sanctioned by the school system were also taking place in the same schools as those involved in the project. For this reason both administrative and instructional personnel were greatly overloaded with demands on their time. The net result of both of these administrative difficulties (which persisted throughout the year) was the irretrievable delay of the collection of certain of the data which had been required to implement the

design as planned. As a consequence of these difficulties, it became necessary with one exception to abandon the pre-post design feature of the evaluation. The value of the process observations was also sharply curtailed, since the observations in question could not actually be conducted until nearly the end of the project and thus lost any feedback value they might have had to the project staff.

Audio-Read Systems makes no apologies for the difficulties encountered in these respects. These problems were repeatedly presented to the project staff and discussed in weekly meetings from December onward. The resolutions of these difficulties were the most practicable possible. Overall, it is our feeling that the evaluation information which is contained in this report is the most complete and useful information which could have been gathered under the circumstances (given the constraints which existed). No further reference to the implementation of the plan will be made during the remainder of this report, but the reader is cautioned to bear in mind that the operational conditions of the evaluation as described above resulted in conclusions and recommendations which are often based more upon the best judgment of the E's and their interpretations of the data collected, than upon rigorous design.

## II. THE EVALUATION AND ITS RESULTS

As has been indicated earlier, the first task undertaken by the E's was the restatement of the objectives of the three components supplied to the E's by the project staff, and the specification of the data and measures which would be developed and applied as part of the evaluation. A document to this effect was prepared and submitted on 14 November and after suitable review was approved. This document then became the framework for the evaluation. It might be noted at this point that the goals of the project were rather broad and that the major function of this document was to define operationally those aspects of each of the goals which would be subjected to measurement and evaluation.

In the ensuing sections, each Project Goal is presented as it was stated by the Project Staff, along with the method planned and the results expected. Following these, the evaluation procedure and data to be collection (as approved in the 14 November document) are presented and the results are presented and discussed pertaining to that goal. Subsequently the next Goal is presented

and discussed in the same fashion. These presentations are further subdivided according to the three Components concerned. Thus rather than being presented all in one section, the results and discussion are presented in connection with each of the goals established by the project staff for each of the Components. (A summary of conclusions and recommendations follows in Section III which draws together the findings of the project as a whole.)

### Elementary Component

During the past (third) year of the project, 20 teachers in 8 schools participated actively in the Project, covering a grade range of 1-6 with one special education class. These teachers served more than 560 students. (According to information supplied by these teachers in the interviews, an unknown number of additional teachers also engaged in career education activities in their classes as a result of exposure to the project.) This number of teachers and students is down sharply from that reported by previous evaluators for both the first and second years of the project (34 teachers, 1350 students and 50 teachers, 1635 students, respectively). The E's have made inquiries to determine the reason for this drop. Project Staff have indicated that the third year participants were selected from among those participating in earlier years in a deliberate reduction of the scope of the effort. The rationale for this reduction was that the Project was to focus on certain staff development activities during the third year (through the medium of the workshops) and could not handle the larger number of teachers with the resources available. It was further expected that a more intensive effort with the smaller group of teachers would provide these teachers with the basis for acting as resource teachers themselves in future years after Project support for career education had been terminated with the end of the Federal grant.

It should be noted, as mentioned above, that this plan has already begun to work in the sense that a number of teachers not formally a part of the third year program have engaged in career education activities in their own classes, drawing upon the activities and participation of their colleagues who are a part of the participant group. However, to the E's knowledge, no

systematic plan to enhance this type of dissemination of the content of the Project has been developed by the Project Staff, and the extent to which the participant teachers will prove effective as on-site resource persons for the other teachers is not clear at the present time.

Goal I - The development of leadership skills

A. Method - Two 2 1/2 day workshops for teachers and administrators.

B. Expected results - Two teachers and one administrator from each of the eight project schools will develop leadership skills to become experts in the implementation of career awareness programs. Leadership skills have been defined to the project staff as the ability to plan, operate and evaluate career awareness plan or program as appropriate to the particular school.

Data collected

E's received agendas and attendance lists for both scheduled workshops showing that they were held on 5, 6, and 7 October 1972 and 17, 18, and 19 January 1973 at Lake Clifton Senior High School. Twenty-two people attended the first workshop and 21 the second. However, only 2 administrators (really senior teachers) attended these workshops, so that the project did not succeed in attaining the administrative participation in these workshops that it might. However, planning meetings were held prior to the workshops which did involve administrators from each of the schools.

As a part of the workshops, participants were expected to develop plans acceptable to the project staff covering the content, operation, and evaluation of their career awareness programs. A review of the "plans" developed in the first workshop suggests that they are more in the nature of suggested activities and assessments of those activities than plans per se. They were however deemed acceptable by the project staff. E's have conducted observations at each of the 8 project schools (see Summary of Observations, Appendix B) and have found that the activities going on in the school are identical or very similar to those specified in the plans developed at the first workshop. Further evidence of this can be found in the reports of activities submitted to the second workshop as progress reports from the teachers. (See Appendix C).

The project staff also indicated that it expected to collect evidence of the qualifications of the attendees through self-report measures and interjudge agreements. Little in the way of interjudge agreement was attempted. Self-report measures were collected in the form of an attitudinal instrument developed by the project staff. This attitudinal survey was administered by the project staff on a pre-post basis once before the first workshop and again the week of 28 May 1973. These data have not yet been supplied to the E's, and therefore are not included here.

Finally E's conducted a survey of attendees seeking their impressions of the impact of the workshops. The results of this survey are given along with the survey questions in Table 1. This table shows that the general reception of the workshops was very good. There were particularly strong responses indicating the value of small group discussions at the workshops and suggesting that the workshops created more positive attitudes toward the concept of career education. Somewhat less satisfaction was shown with the organization of the workshops, and use of audio visuals, but in general the average rating for the workshops, and use of the areas at issue was moderately to strongly positive. The strongest points about the workshops seemed to be the opportunity of working closely and cooperatively with others and sharing experiences and ideas. The most frequent criticism was that the workshops were not as well organized as they might have been. Finally the workshops were seen as stimulating a number of different kinds of activities related to career education including writing exercises, interviews and visits by various workers and discussions and role playings about various careers.

In summary, the project staff have been substantially successful in attaining Goal I.

Goal II - Student impact

A. Method - Students will participate in the execution of the program as designed.

B. Expected results - Students will display increased self awareness and career awareness.

Data collected

Full descriptions of the treatment (program) in each school (see Appendix A, Component Program Descriptions and Appendix B, Summary of School Observations were developed over the period of the year. These show that the treatments planned were carried out essentially as they had been conceived.

Table 1  
Workshop Survey Results

Please think about your experiences with the Career Education Workshops during this past year. Below are a number of statements concerning these workshops. Please respond to each statement in terms of your overall impression of all of these workshops which you attended by drawing an "X" through the appropriate letters for each statement. The codes are: SA - Strongly Agree

A - Agree

N - No opinion

D - Disagree

SD - Strongly Disagree

1. The use of small group discussions at the Workshops was very helpful.	SA	A	N	D	SD
	12	7	-	-	-
2. The symposia were of great value.	SA	A	N	D	SD
	4	12	2	1	-
3. The lecture presentations were very helpful.	SA	A	N	D	SD
	6	8	1	3	
4. Audio-visual presentations were used wherever they might have helped.	SA	A	N	D	SD
	6	10	-	2	1
5. The Workshops made appropriate use of community resources and participants.	SA	A	N	D	SD
	1	10	1	1	-
6. The overall organization of the Workshops was very well done.	SA	A	N	D	SD
	6	8	2	2	1
7. I felt that the participants in the Workshops accomplished a great deal of useful work.	SA	A	N	D	SD
	7	10	1	1	
8. I felt that I gained a great deal of knowledge from my attendance at the Workshops which I will be able to use in my school work.	SA	A	N	D	SD
	10	6	1	2	-
9. As a result of these Workshops I have a more positive attitude toward the concept of Career Education.	SA	A	N	D	SD
	12	6	1	-	-
10. I felt that the Workshops offered me a good opportunity to express my ideas and opinions on Career Education.	SA	A	N	D	SD
	8	9	-	2	-

Table 1 (Continued)

	S	A	N	D	SD
11. The Workshops were too long to be effective.	-	-	3	12	4
12. I have already applied much that I learned in the course of the Workshops.	4	13	-	1	-
13. I would recommend more inservice training of this type with regard to Career Education, at an early date.	6	9	2	2	-
14. I expect that the Career Education Project will have a significant and positive impact on school children.	4	10	-	-	-
15. As a result of the Workshops, I intend to emphasize Career Education to a greater degree in my work.	10	8	1	-	-

B. Please answer the following questions as briefly as possible:

1. What in your opinion was the strongest point about the Workshops you attended?
2. What in your opinion was the weakest point about the Workshops?
3. If possible, list three activities which you have undertaken as a direct result of your attendance at these Workshops.

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

Table 1 (Continued)

1. What in your opinion was the strongest point about the Workshops you attended?

---

Most of those responding thought that the strongest point was the opportunity to work cooperatively with others to plan classroom activities and the resource guide.

The next largest group liked the idea of teachers sharing experiences and ideas with each other. Others made comments generally supportive of the goals of career education.

2. What in your opinion was the weakest point about the Workshop?

---

The most frequent criticism was that the workshops were not as well organized as they should have been.

The remaining comments were evenly distributed about; not liking the evaluation, lack of advance notice about the evaluation, not enough teachers attending and not enough opportunity for sharing of ideas.

3. If possible, list three activities which you have undertaken as a direct result of your attendance at these Workshops.

---

Activities in order of frequency:

1. Writing exercises [including: job research, filling out job applications and writing plays and songs about careers]
2. Interviews of and visits by various workers.
3. Discussions and role play of careers.
4. Incorporation of career education ideas into existing curriculum - a shift in emphasis.
5. Actual experiences [students volunteering for school jobs, classroom jobs and simulated work situations]
6. Field trips
7. Other classroom activities such as: units on work, learning stations, use of audio-visual equipment and materials, self and career awareness programs.

### Measurement of career awareness and self awareness

Project staff agreed to define what was meant by the terms career awareness and self awareness so that E's might attempt to find one or more measures appropriate to the assessment of career and self awareness development. Project staff submitted definitions of career awareness and self awareness as follows:

Self awareness - "Based upon knowledge of self, including abilities, skills, talents, interests and needs, the students will be able to describe and demonstrate their various abilities and interests."

Career awareness - "Includes knowledge of the family as a social institution, knowledge of some basic educational pre-requisites for a variety of career options, some knowledge about the range and nature of various job families, knowledge of various essentials for the maintenance of a democratic society and the regulation of human behavior, and the knowledge of worthwhile opportunities and activities for self-fulfillment."

It was agreed by all parties that it would not be possible to assess these concepts in their full breadth. Therefore aspects of each were selected. The definition of self awareness was explicated into an instrument which permitted the assessment of self awareness according to a semantic differential. For the assessment of career awareness, the E's developed a matrix of standard occupations and descriptors to be applied to them and collected paragraphs about job preferences. These activities are more fully described below along with the results of their applications. The instruments may be found in Appendix D.

#### Career awareness

With respect to career awareness, it was originally planned that the child would be asked to classify the occupation of the bread-winner of the family into one of 12 job clusters where the job clusters were indicated not by occupational titles but rather by functional descriptions of the kinds of activities involved. (Each of 12 or 13 occupational areas derived from the literature would be described in terms of selected dimensions based on logical analysis by the project staff and by the evaluation team.) Parents would then be asked to make a similar classification and career awareness would be indicated by the extent to which the child's classification matched that of the parent.

This same task would be repeated at the higher grade levels 4, 5, and 6, but at these grade levels an additional task would be required. Each student would be asked to describe his career choices and why, and the responses would be examined and scored with respect to the number of critical dimensions of the occupation in question which were indicated in the child's response. Career awareness would be indicated by the extent to which the child's reasons for career choice had something to do with the relevant critical dimensions which described the occupational grouping into which his career choice fell.

After these plans were approved, the project staff was not able to develop a set of functional descriptions of various occupational categories which had sufficient consistency to form the basis for the required instrument. Then the staff coordinators in the city became reluctant to request children to describe the occupation of the breadwinner of the family since many welfare families had no breadwinners as such. Therefore, the baseline data collection on the career awareness dimension became hopelessly snarled, and a period of discussion ensued which became sufficiently protracted that the collection of baseline data became unfeasible.

As a compromise measure of career awareness, to be administered only on a post-test basis, the E's eventually developed a set of "standard" (common) occupations and "standard" descriptors of these occupations. The task then was to ask the respondent to check those descriptors which typically applied to the occupation or usually applied to a person in that occupation. (See Appendix D.)

As was true for the self-awareness administration, a somewhat modified form of the instrument was administered for grades 1 to 3 (Appendix D). The occupations and descriptors forming the basis for the grades 1 to 3 form were a subset of those administered to grades 4 to 6. Project staff approved these instruments and they became the bases for the collection of the only career awareness data directly solicited by the E's. (Job preference paragraphs were collected by teachers.) Administration was carried out indirectly through the project coordinator and took place over the months of March, April, and May of 1973. (This was a rather lengthy period of administration, but the E's had no power to control the schedule which was dependent upon a variety of other activities associated with projects unrelated to the Maryland Career Development Project.)

The E's did not feel that evaluation experts should be asked to designate the appropriate keying for the career awareness instrument. Consequently a key was contrived by asking several of the project staff to mark the instrument according to the directions, indicating the appropriate descriptors for each occupation. Student scores were then obtained by comparing student responses to the Consensus Key derived from the responses of the project staff. Simply stated, the task for the student was to indicate whether or not the occupational descriptor applied to each of the occupations. A student score for an occupation was the percentage of all possible times for which his responses matched those on the Consensus Key. Matches were considered to be obtained where the key was not marked and the student did not respond to a particular descriptor for a given occupation, as well as in those instances in which both the student and the key marked a descriptor. Thus the student score for a given occupation was simply the percentage of total number of opportunities for choice in which his choices matched those of the key. A student's overall score was obtained by taking the median of these percentages across all of the occupations in the instrument. Thus a "student's score" is a median percentage of match across the standard set of occupations. Obviously the higher the student's score, the more "career-aware" the student may be expected to be.

As well as the student scores described above, the E's also calculated occupational median percentages across classes. These occupational median percentages are comprised of the student's scores for a single occupation taken over all students in a class. The occupational medians provide an indication of the extent to which various of these "standard" occupations are known to the students.

In addition to the above analyses, two sets of overall medians were obtained, the class medians that is the median of all students over all occupations for a given class, i.e., the median of the student's scores; and the median occupation score, taken over all classes, for primary classes and for intermediate classes. These medians permit the comparison of classes and occupations on an overall basis.

There were 19 teachers in 8 elementary schools who participated in the program. One of these teachers left the school system during the year, so that the base number of teachers for the elementary component was 18. All 18

teachers supplied the career awareness data for their students, which was collected late in the academic year. Table 2 presents the median primary student scores for each occupation by class and the class medians. Table 3 presents the occupational medians over all classes in primary and all classes in intermediate grades. No grand medians taken over all elementary classes were computed, since it was felt that the age differential between primary and intermediate prohibited such a comparison.

The overall medians for primary grades show that the class medians ranged from 70 to 80% and that occupational medians for the 8 occupations included in this level of the test also ranged from 70 to 80%. Furthermore the table shows that there was relatively little variation around these means either within class across occupations or within occupation across classes. The highest percentages of correct match for occupations were for truck driver, nurse, and store clerk. Two of the nine primary classes had medians of 80%, three of 75%, and the remainder of 70%.

It will be noted from Table 2 that the minimum class by occupation median shown is 60, which occurs for athlete, class A; teacher, class N; and musician and mechanic, class E. The highest scores are 90 scored by class D for truck driver, nurse, and store clerk; by class Q for nurse, and by class F for teacher and store clerk.

One of the more notable features of these data is the comparative uniformity of the scores across classes and occupations. To some extent, this appears to be a function of the nature of the test and the scoring system which was used. There is a tendency in the scoring system for nonresponse to be counted as a match. However the only alternative to this condition would have been to use a much more complicated response system which would have prolonged the administration of the tests and undoubtedly have reduced the validity of student responses due to fatigue and boredom. Therefore it should be kept in mind that these scores possibly over-represent the degree of career awareness of the various students, but nonetheless are probably of reasonable validity from a comparative standpoint.

It should also be noted that an examination of the within class distributions (not presented here for reasons of space) indicated that the individual student scores did indeed exhibit a rather considerable range

Table 2

## Career Awareness - Primary Medians

Grade	1st	1st	2nd	2nd	2nd	2nd	2nd	2nd	3rd	3rd
Class	B	A	N	D	E	C	Q	F	G	
Truck Driver	80	80	80	90	70	80	80	80	70	70
Athlete	70	60	70	70	70	70	70	80	80	70
Nurse	80	80	80	90	80	80	90	80	80	80
Teacher	70	70	60	70	70	80	70	90	80	80
Construction Worker	70	70	70	80	80	70	70	75	70	70
Store Clerk	80	70	80	90	75	70	80	90	70	70
Musician	70	70	70	70	60	70	70	70	65	65
Mechanic	75	80	70	85	60	70	70	80	80	80
Median	75%	70%	70%	80%	70%	75%	75%	80%	70%	70%

Table 3

## Career Awareness - Occupational Medians

Over all medians - Primary

Truck Driver	80%
Athlete	70%
Nurse	80%
Teacher	70%
Construction Worker	70%
Store Clerk	80%
Musician	70%
Mechanic	80%

Over all medians - Intermediate

Secretary	70.0%	Seamstress	63.3%
Reporter/Newspaperman	64.95%	Store Clerk	66.6%
Barber/Beautician	70.0%	Computer Worker	63.3%
Custodian	70.0%	Cashier	66.6%
Sanitary Worker	70.0%	Social Worker	63.3%
Nurse	70.0%	Cook	63.3%
Telephone Operator	60.0%	Doctor/Dentist	56.6%
Outside Salesman	66.6%	Stewardess	66.6%
Lawyer	68.3%	Bus/Truck Driver	60.0%
Factory Worker	63.0%	Construction Worker	63.3%
Teacher	66.6%	Fireman	60.0%
Shopkeeper	66.6%	Policeman/Woman	60.0%
Waiter/Waitress	66.6%	Mailman	63.3%
Artist	66.6%	Musician/Entertainer	60.0%
Appliance Repairman	63.3%	Mechanic	63.3%
Office Clerk	63.3%	Athlete	63.3%

within each of the occupations for essentially all classes. To illustrate this conclusion, Exhibits 1 and 2 show frequency polygons for the combined class distributions for the primary and intermediate groups, respectively, taken over all the occupations. (The individual occupational distributions are not presented for reasons of space, but show similar variation.) The exhibits present a good picture of the distribution of career awareness at the elementary level. For example, class A had student scores all the way from 40 to 100, with most of the scores included in the range of 50 to 90. The E's are of the opinion that an adequate variance in the individual scores was obtained on these tests.

On the basis of the data shown above, the E's can only conclude that the primary teachers have been doing an excellent job in familiarizing the students with the general characteristics of the 8 selected standard occupations included in this awareness instrument. There are as may be expected a handful of students in each of the classes for whom knowledge about these jobs is sketchy, but the bulk of the students seem to have acquired an awareness of about 70 to 80% of the attributes of these occupations.

Turning now to the intermediate level career awareness results (Table 4), we see that the occupation means for each class are again relatively and rather uniformly high. It can be seen at a glance that the medians for these students range somewhat lower than those for the primary students, but it should be remembered that these student scores are based upon 3 times as many occupational descriptors (30 instead of 10) as compared to the primary level test. These medians range from a low of about 47 (the only class median in the 40's for an occupation) to a high of about 82; the 47 being for class L for doctor/dentist and the 82 for stewardess for class J. There are two others in the 80's, that for barber/beautician for class J and sanitary worker for class J. The class medians for the intermediate group range from about 60 to about 72, with classes M and J in the 70's and classes L and P at the 60 level, the remaining classes in between. The occupational medians for the intermediate groups are again found in a very narrow range (56-70%). The highest include secretary, barber/beautician, custodian, sanitary worker and nurse. The lowest include doctor/dentist, telephone operator, bus/truck driver, fireman, policeman, and musician/entertainer. (While these latter occupations are among the more popular choices of the students, it is obvious that they have some misconceptions about what is involved in them.)

Career Awareness - Frequency Distributions

Primary

f

680  
660  
640  
620  
600  
580  
560  
540  
520  
500  
480  
460  
440  
420  
400  
380  
360  
340  
320  
300  
280  
260  
240  
220  
200  
180  
160  
140  
120  
100  
80  
60  
40  
20  
10  
0

10%

20%

30%

40%

50%

60%

70%

80%

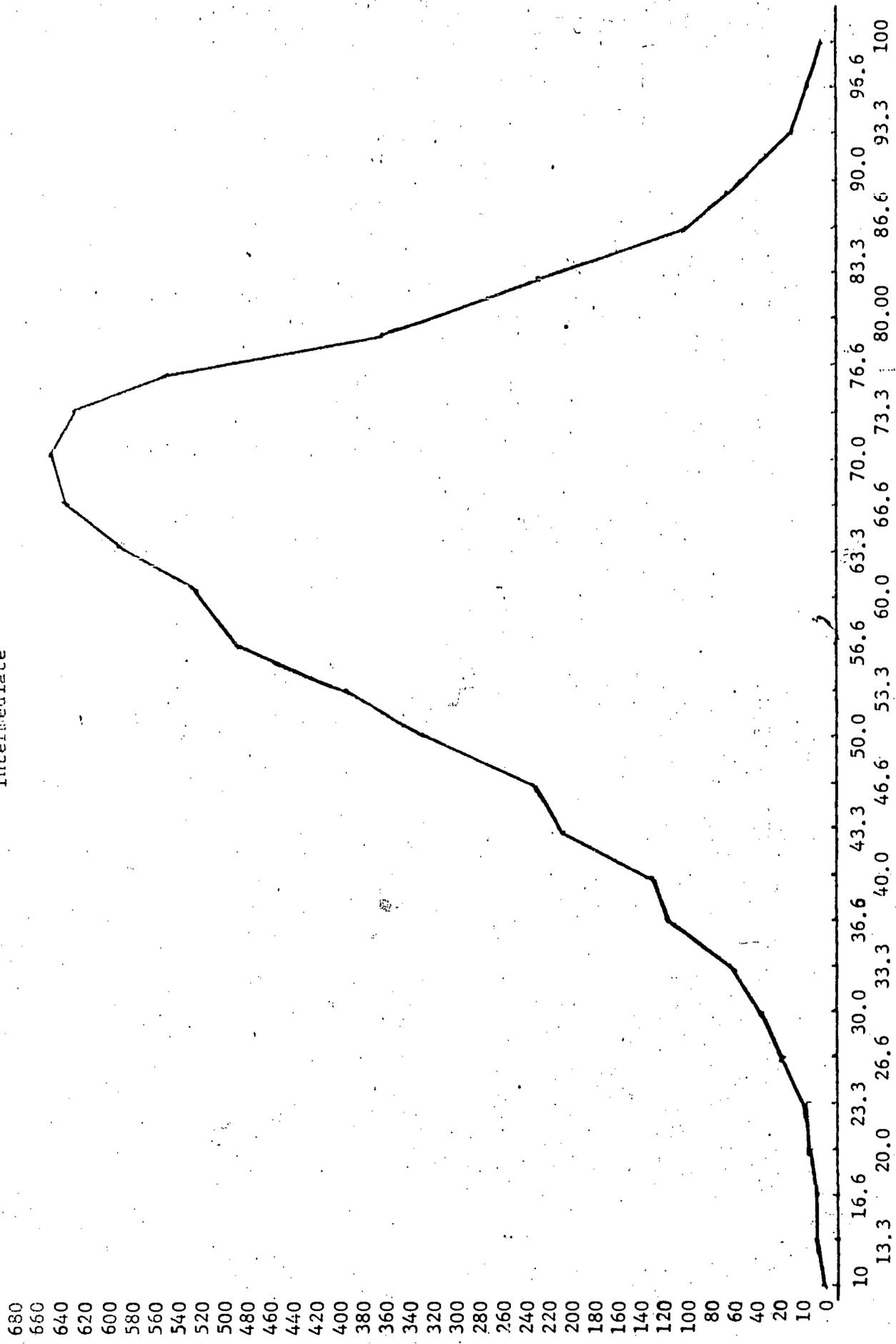
90%

100%

Percentage Correct

Exhibit 1

Intermediate



Percentage Correct  
Exhibit 2

Table 4  
Career Awareness - Intermediate Medians

Grade	4th	5th	6th	5th	6th	4th	5th	6th	4th	5th	6th
Class	H	J	M	I	K	R	L	F	L	L	F
Secretary	70.0	70.0	70.0	73.3	60.0	66.6	54.95	73.3	66.6	60.0	73.3
Reporter/ Newspaperman	64.95	70.0	70.0	64.95	60.0	66.6	60.0	64.95	66.6	60.0	64.95
Barber/Beautician	66.6	73.3	73.3	70.0	63.3	70.0	66.6	70.0	70.0	61.65	70.0
Custodian	66.6	70.0	70.0	64.95	63.3	70.0	70.0	66.6	70.0	61.65	66.6
Sanitary Worker	70.0	76.6	80.0	66.6	68.3	73.3	61.65	70.0	66.6	61.65	71.65
Nurse	63.3	73.3	73.3	68.3	66.6	66.6	66.6	70.0	66.6	66.6	70.0
Telephone Operator	63.3	66.6	70.0	60.0	54.95	66.6	56.6	60.0	66.6	60.0	60.0
Outside Salesman	64.95	73.3	73.3	61.65	63.3	63.3	60.0	63.3	63.3	60.0	70.0
Lawyer	64.95	70.0	70.0	71.65	66.6	66.6	63.3	66.6	66.6	63.3	66.6
Factory Worker	68.3	66.6	66.6	54.95	56.6	66.6	53.3	66.6	66.6	53.3	66.6
Teacher	66.6	63.3	63.3	64.95	73.3	60.0	63.3	73.3	60.0	63.3	63.3
Shopkeeper	73.3	70.0	70.0	66.6	66.6	63.3	63.3	66.6	63.3	63.3	66.6
Waiter/Waitress	73.3	70.0	70.0	63.3	63.3	60.0	56.6	60.0	60.0	56.6	70.0
Artist	63.3	76.6	74.95	63.3	61.65	66.6	61.65	63.3	66.6	61.65	63.3

Table 4 (Continued)

Grade	4th	6th	5th	5th	6th	4th	6th	5th
Class	H	M	J	I	K	R	L	F
Appliance Repairman	66.6	70.0	63.3	54.95	60.0	56.6	63.3	60.0
Seamstress	73.3	66.6	70.0	56.6	56.6	63.3	63.3	60.0
Store Clerk	73.3	66.6	70.0	63.3	60.0	66.6	60.0	66.6
Computer Worker	71.65	66.6	68.3	56.6	56.6	66.6	66.6	60.0
Cashier	70.0	73.3	70.0	60.0	63.3	66.6	70.0	63.3
Social Worker	66.6	66.6	66.6	56.6	63.3	66.6	66.6	56.6
Cook	61.65	64.95	70.0	53.3	58.3	63.3	63.3	56.6
Doctor/Dentist	66.6	53.5	64.95	56.6	66.6	46.6	46.6	53.3
Stewardess	70.0	66.6	81.65	60.0	70.0	53.3	64.95	54.95
Bus/Truck Driver	63.3	56.6	64.95	56.6	56.6	63.3	70.0	56.6
Construction Worker	63.3	56.6	78.3	60.0	63.3	63.3	71.65	54.95
Fireman	70.0	56.6	66.6	56.6	61.65	56.6	61.65	58.3
Policeman/Woman	60.0	63.3	66.6	60.0	60.0	50.0	56.6	58.3

Table 4 (Continued)

Grade	4th	5th	6th	5th	6th	4th	6th	5th
Class	H	M	J	I	K	R	L	F
Mailman	60.0	71.65	73.3	60.0	56.6	66.6	80.0	56.6
Musician/ Entertainer	56.6	68.3	70.0	56.6	61.65	66.6	68.3	54.95
Mechanic	60.0	66.6	71.65	56.6	56.6	66.6	73.3	60.0
Office Clerk	66.6	66.6	71.65	56.6	58.3	70.0	73.3	56.6
Athlete	63.3	70.0	70.0	56.6	66.6	73.3	73.3	53.3
Median	66.6	70.0	71.65	61.65	63.3	6.66	60.0	60.0

Again the E's feel that the conclusion is warranted that rather good progress is being made by these teachers in acquainting their students with the critical occupational descriptors characteristics of a fairly wide range of occupations. It will be remembered that there are some 30 occupations and 30 descriptors involved in this career awareness exercise and that in general the various classes are able to match judgments with respect to the presence or absence of a descriptor with the consensus key in many more than half the cases and in most instances with 2/3s or more of the descriptors. For example, the median performance for class M with respect to "social worker" is a match with the consensus key of 20 out of 30 of the descriptors in the instrument.

Some additional information about career awareness exists in the form of paragraphs written by intermediate elementary students. These paragraphs were in response to the assignment of about writing a paragraph about "what I want to do and why". Table 5 summarizes the analysis of these paragraphs in terms of the number of occupations that were mentioned and a summary of the reasons that the students gave for the occupation chosen. It may be noted that the most popular occupations in these paragraphs by far were nurse, teacher, sports performer and entertainment performer. Office worker, postman, artist and model and protective worker were mentioned a number of times (6 to 9), but the remaining choices were scattered over a wide variety of occupational choices from steel worker to President of the United States.

The reason given by the students for their choices was predominantly "liking the duties involved", given 204 times by 117 students. (Of course the students may not understand clearly what duties are involved in their occupational choices.) Next most prominent reasons include "it helps others or (family)"; "like the people you work with"; "money"; and "it's fun or interesting or I just like it".

In general, the E's feel that the level of career awareness displayed in these data is quite substantial. It is to be regretted that a pre-post comparison was not possible under the constraints which affected the conduct of the evaluation.

#### Self awareness

As indicated earlier, the E's developed a semantic differential measure of self awareness following Osgood.\* Project staff indicated several

\* Osgood, C.E., Suci, G.J., and Tannenbaum, P.H. The measurement of meaning. Urbana: The University of Illinois Press, 1957.

Table 5  
Results of Career Awareness Intermediate Paragraphs  
(What I Want to Do and Why)

<u>D.O.T Occupational Categories</u>	<u>Number Choosing</u>
<u>Professional, technical, managerial</u>	
nurse	20
doctor	5
teacher	28
artist	7
writer	2
lawyer	1
architect	2
principal (school)	1
computer operator	2
interior decorator	1
President of U.S.	2
scientist	2
mathematician	1
dentist	1
<u>Clerical and Sales</u>	
office worker	8
cashier	2
telephone operator	1
sales lady	3
<u>Service Occupations</u>	
policeman/woman	6
beautician	4
stewardess	3
serviceman-military	1
fireman	6
waitress	2
cook	4
babysitter	2
postman	1
<u>Farming, fishery and related</u>	
dog raiser	1

Table 5 (Continued)

D.O.T Occupational Categories	Number Choosing
<u>Processing</u>	
none chose	
<u>Machine Trade</u>	
steel worker	1
mechanic	5
<u>Bench Work</u>	
repairman	1
<u>Structural</u>	
construction worker	1
house painter	1
<u>Miscellaneous</u>	
sports	29
performer	13
model	9
driver	5
housewife	3
government worker	1

Table 5 (Continued)

Reasons		Times Used	By How Many Students
I.	Reasons having to do with the skills involved in the job		
	I already have some of the skills required	25	21
	I want to learn/go to school	13	12
	I am capable/I would be good	12	12
	To improve myself	5	5
II.	Reasons having to do with the actual duties of the job		
	I like to do those duties involved	204	117
	The job is fun/interesting/"like the job"	48	44
	Like things involved (equipment for example)	3	33
	Because it is difficult	2	22
	Because it is easy	1	11
III.	Reasons having to do with the people you work with		
	I know someone in the field or friends also wish to do	7	6
	I like the people you work with	44	39
IV.	Reasons having to do with the rewards to be gained by having that job		
	For the money	44	42
	To have/own things involved	11	9
	For fame	23	20
	Would like to have the qualities of those fields	9	9
	Nice/good life, home, family, happiness	10	10
	Because of the travel involved	18	18
	To be important	4	4
	Like the location/setting	1	1

dimensions to be covered by this self awareness measure: physical, emotional, employability skills, and work settings. Based on these categories and on a review of Osgood, a series of simple adjective pairs were selected to form bi-polar scales covering the four dimensions indicated by the project staff. At the grades 1 to 3 level, a subset of the semantic differential tasks for the 4 to 6 grades was selected in deference to the shorter attention spans and more difficult administrative problems characteristic of younger children. At the grades 1 to 3 level, there were 12 bi-polar pairs which were read to the students; students were asked to mark their positions on the differential scales by X-ing out positions on the pictorial ladders shown (see Appendix D). At the grades 4 to 6 level, the more standard form of visual presentation and a longer test of 25 pairs was used (Appendix D). Copies of the forms were shown to project staff and to USOE personnel and approved by both. Administration by classroom teachers was planned for the week before Christmas vacation. Unfortunately, administration was not carried out during that week as the elementary project coordinator failed to schedule it with classroom teachers. As a consequence, the baseline data collection occurred for the most part during the month of January. Post-test administration was carried out during the latter part of May.

In order to provide a standard against which to compare the students self-ratings on the Semantic Differential, teachers were asked to rate each student on the same set of adjectival pairs according to their own perceptions of the student. The Semantic Differential distances were then calculated between the student self-ratings and the teacher ratings. The procedure was repeated at the post-test period, and these self-ratings were again compared to the original teacher ratings. Increasing self awareness was defined as the diminution of the average distance between student and teacher ratings from baseline to post-test measure. That is, those students from whom the Semantic Differential distance between their own self-ratings and their teacher's ratings decreased were defined as having increased their level of self awareness.

Of the 18 teachers who supplied the career awareness data, 5 did not supply complete self awareness data for their students. Of these 5 teachers, 1 refused to administer the self awareness instrument at both the pre-test and post-test administrations, (this teacher also refused to allow the E's to

observe in her class), and 3 administered the instrument to the students but failed to fill out their own ratings. One teacher had administered the instrument at the pre-test administration, but did not administer it at the post-test administration. Therefore the Semantic Differentials which are reported as measures of student self awareness, and discussed in a later section, are based upon data supplied by 13 teachers for their respective 13 classrooms.

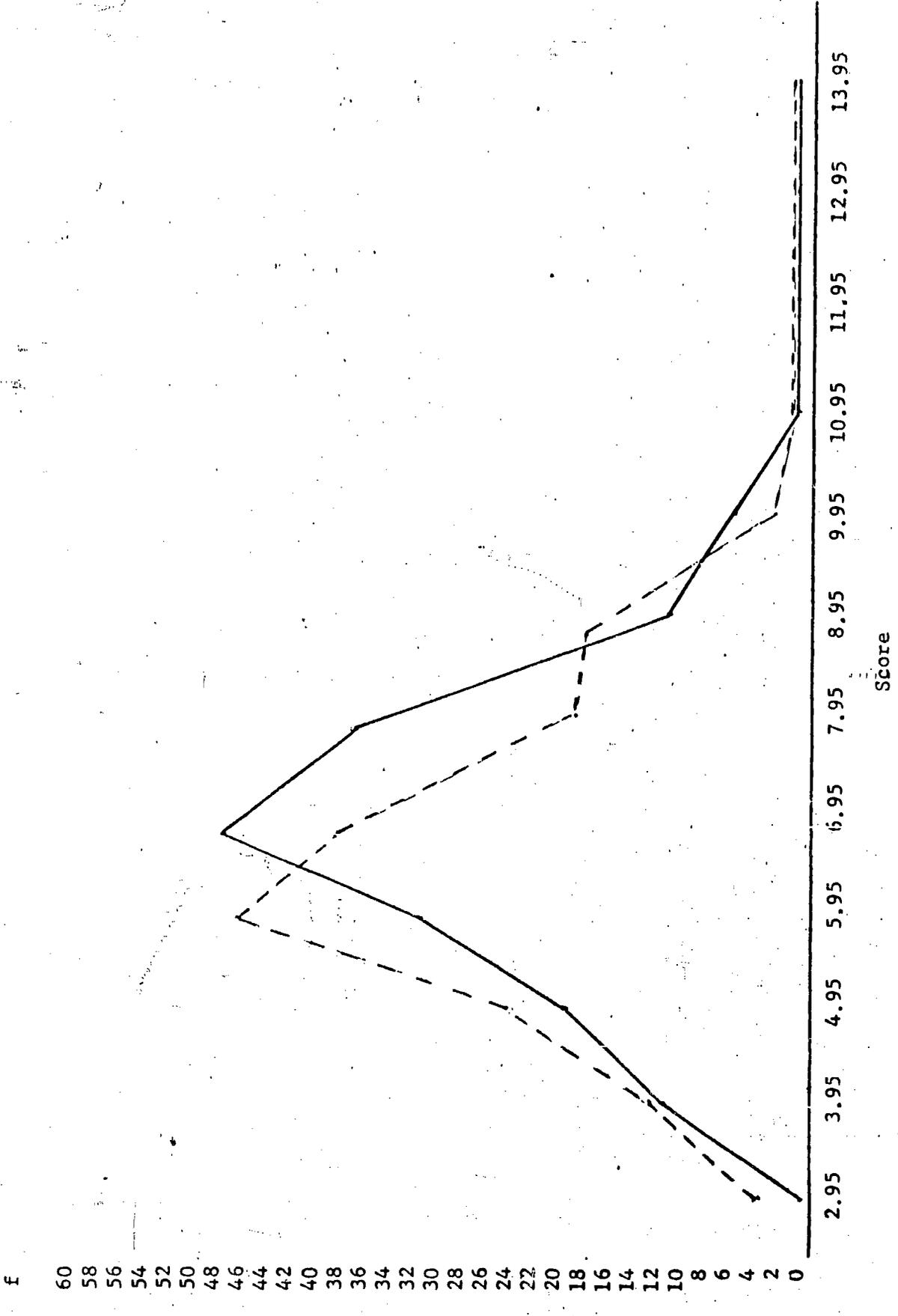
It should be further pointed out that although it was originally planned to collect teacher ratings as the standard of comparison at both the pre-test and the post-test administrations of the self-awareness instrument, it was subsequently decided (in order to conserve the good will of the teachers in the project) to use the pre-test teacher ratings as the bases of comparison for both pre- and post-test administrations of the student measure of self awareness. This seemed defensible as the teachers had plenty of time to get to know their students before the first administration.

It should be recalled that the semantic differential describes the "distance" between the student self-rating and the teacher ratings of the student across a number of "dimensions" defined by bi-polar word pairs. Tables 6 and 7 present the distributions of the semantic distances (D's) for the students in each of the 13 classes, based only on complete data (students for whom data for both administrations was available). The means shown are based on ungrouped data. Composite frequency polygons for primary and intermediate groups are shown in Exhibits 3 and 4, respectively. Table 8 presents the results of the analyses of the semantic differentials, individually by classes. The D-bars shown are the average student distance from the teacher at the first and second administrations of the test respectively. Delta-bar of D shows the mean of the differences between first and second administrations over the students in the class, and therefore is equal to the difference of the means. The next column shows the standard deviation of the differences and the final columns indicate the results of two significance tests.

The results of the significance tests might best be described as mixed. Student's t was used to test the hypothesis that the mean difference between first and second administrations was zero. This hypothesis was rejected at about the 5% level or better for five of the 13 classes--an encouraging result, considering the barely three month period existing between administrations. Thus,

Frequency Distributions - Self-Awareness

Primary



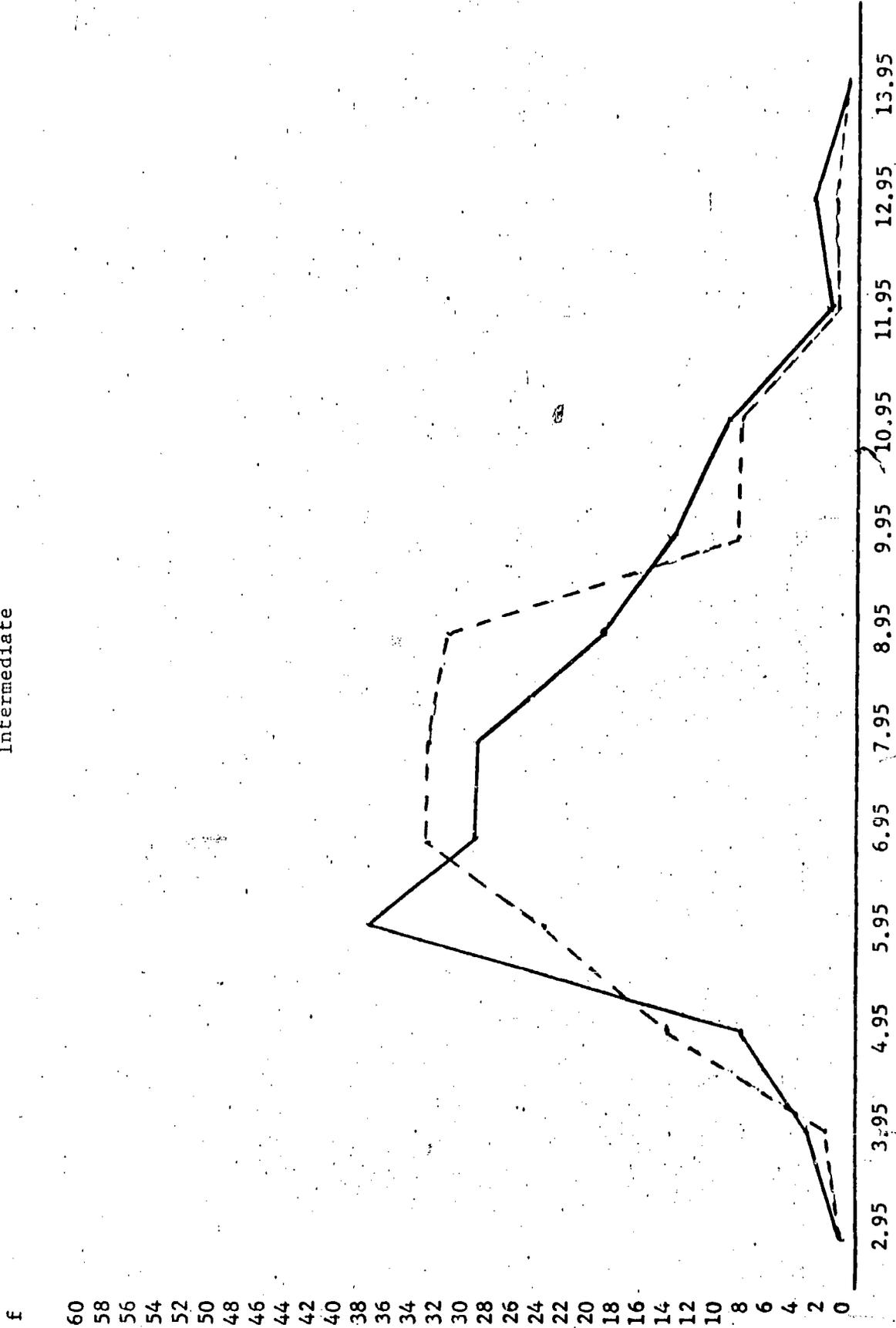
— = pre test

- - - = post test

Exhibit 3

Frequency Distributions - Self Awareness

Intermediate



Score

— = pre test

- - - = post test

Exhibit 4

Table 6

Primary Self Awareness - f Distributions by Class

Class	A		B		C		D		E		F		G		Total Primary	
	1st	Post	1st	Post	2nd	Post	2nd	Post	2nd	Post	3rd	Post	3rd	Post		3rd
Grade	Pre	Post	Pre	Post												
Pre or Post?																
D - Scores																
13.5 - 14.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.5 - 13.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.5 - 12.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.5 - 11.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.5 - 10.4	2	1	0	0	0	0	1	0	3	2	0	0	0	0	6	3
8.5 - 9.4	3	1	0	3	0	1	2	2	4	9	2	0	0	1	11	17
7.5 - 8.4	6	4	5	2	4	1	7	4	7	3	2	0	5	4	36	18
6.5 - 7.4	5	5	9	6	6	2	11	8	6	6	2	3	8	8	47	38
5.5 - 6.4	3	8	2	4	10	8	2	6	2	5	8	1	7	7	31	46
4.5 - 5.4	3	5	3	4	2	4	0	5	3	0	3	1	5	5	19	24
3.5 - 4.4	2	0	2	1	1	6	2	0	0	0	1	2	3	3	11	12
2.5 - 3.4	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	3
N	24	24	21	21	23	23	25	25	25	25	15	15	28	28	161	161
Ungrouped Mean	7.25	6.69	6.66	6.52	6.38	5.53	7.26	6.63	7.60	7.97	6.55	7.97	6.26	6.38	6.87	6.75

Table 7

Intermediate Self Awareness - f Distributions by Class

Class	H		I		I		J		J		K		L		L		M		Total Intermediate	
	4th	Pre	4th	Pre	5th	Post	5th	Pre	5th	Post	6th	Post	6th	Pre	6th	Post	6th	Pre		Post
13.5 - 14.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.5 - 13.4	1	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	3	1
11.5 - 12.4	1	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	2	1
10.5 - 11.4	1	1	1	1	2	1	1	2	2	3	2	1	1	2	2	0	0	0	9	8
9.5 - 10.4	2	4	2	2	1	1	0	4	4	1	2	0	0	3	2	2	2	13	8	8
8.5 - 9.4	6	4	3	2	2	3	1	3	7	7	2	5	2	2	2	2	2	19	31	31
7.5 - 8.4	5	6	6	5	5	6	7	4	5	5	4	4	4	5	3	5	5	29	32	32
6.5 - 7.4	4	6	6	6	6	7	7	3	3	3	3	3	3	6	6	7	7	29	32	32
5.5 - 6.4	5	3	2	3	3	10	11	5	4	4	5	3	3	10	10	10	10	37	24	24
4.5 - 5.4	0	0	0	1	1	4	4	3	1	1	1	1	4	1	1	4	4	8	14	14
3.5 - 4.4	0	0	0	0	0	1	1	0	0	0	0	0	0	2	0	0	0	3	1	1
2.5 - 3.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N	25	25	20	20	20	32	32	25	25	25	21	20	20	30	30	30	30	152	152	152
Ungrouped Mean	8.38	8.21	8.03	7.67	6.84	6.77	8.02	8.35	8.13	6.94	7.45	6.94	7.73	6.94	7.45	6.94	7.73	7.44	7.44	7.44

D - Scores

Table 8

Summary of Self-Awareness Semantic Differential Means  
(Based Upon Complete Cards Only)

Class	Grade	$\bar{D}_1$	$\bar{D}_2$	$\bar{\Delta}_D$	$S_{\Delta}$	Significance	
						t	Sign
A N = 24	1	7.25	6.69	.56	2.12	.05	.05
B N = 21	1	6.66	6.52	.14	1.88		
C N = 23	2	6.38	5.53	.85	1.43	.005	
D N = 25	2	7.26	6.63	.63	1.62	.05	
E N = 25	2	7.60	8.00	-.40	1.21		.02 (-)
F N = 15	3	6.55	5.69	.86	2.29		
G N = 28	3	6.26	6.38	-.12	1.76		
H N = 25	4	8.38	8.21	.17	1.61		
I N = 20	5	8.03	7.67	.36	1.55		
J N = 32	5	6.84	6.77	.07	1.01		
K N = 25	6	8.02	8.35	-.33	1.18		
L N = 20	6	8.13	7.33	.80	.88	.055	.05
M N = 30	6	7.45	6.94	.51	1.45	.02	

these classes exhibited, on the average, some movement toward increased self-awareness. The Sign Test, although a less powerful test, was also employed in order to determine the uniformity of the effect which seemed to exist. Results here were not so encouraging. In most cases, the number of student increases in self awareness was about the same as the number of decreases and no-changes. In one instance a significant number of decreases was found, and in only two instances was a significant number of increases found.

These results suggest that the program was certainly not uniformly successful, as implemented, in achieving improved self awareness--either from class to class, or from student-to-student. Classes A and L apparently achieved a substantial and general impact on the students. Classes C, D, and M were considerably successful with some students, but not with others; while Class E succeeded in decreasing the self awareness of most of its students. A further datum in support of the variability of the effect of the program from class to class is the considerable difference in the standard deviations shown in the Table.

Such results however are not unexpected. It would be unlikely for a program to be equally successful as applied by all teachers, or with respect to all students. The E's searched their records of observations in the classrooms for clues as to the reasons for these differential effects, but without success. Differences may be personal and were too subtle to be identified. However, beneficial effects of the program were achieved in some cases, and this is salutary.

Although the distributions of the D's have relatively little absolute meaning, it might be noted that the measurement procedure produced very reasonable distributions, which were quite similar from class to class. This may be taken as indirect evidence of the value of the procedure. In general, the intermediate students averaged somewhat higher scores than did the primary students, but in view of the fact that their scores were based upon twice as many bi-polar scales, this may be taken as evidence of increasing self awareness as a function of age (as would be expected from maturational considerations). The frequency polygons suggest that the primary group as a whole benefited more from the program than did the intermediates, though this is not a significant difference and must be subjected to further study.

Overall, the program demonstrated a positive impact on student self-awareness in selected instances. This is regarded as an achievement in view of the considerable administrative difficulties involved in the measurement, and in view of the limited interval between administrations of the instrument. Without control groups, it is impossible to attribute the measured effects to the program unequivocally. However, the E's feel that real program effects existed.

In summary, the E's feel that the Project made good progress toward the achievement of Goal II, though clearly some students are not being reached;

Goal III - Resource Development

A. Method - In-service training participants will develop; project staff and others to review.

B. Expected results - Complete draft of resource guide for career awareness programs in the elementary school, reviewed and in readiness for field testing.

Data collected

The development of the resource guide was a project primarily of the elementary component coordinator. In addition, it was made the subject of the career education workshops for the elementary teachers, with part of their workshop activities being devoted to the preparation and examination of units and aspects of this guide. The coordinator compiled and edited much of this material. E's responsibilities to this goal were to monitor progress and to compare the guide as produced to that planned.

An outline of the resource guide as originally planned (December 1972) is shown in Exhibit 5. As of mid-March, a revised outline of the career education resource guide had been received by the evaluators. Plans to include sections on the evaluation of curriculum and how to write behavior objectives had been dropped and some suggestions for using teacher-made materials had been added to the outline. As of mid-March, all portions of the guide currently stated in the outline had been completed or were about to be completed. At that time, it appeared that the guide would be completed on schedule, though the final guide was delayed until 8 June 1973, due to the process of internal review.

The final draft of the Guide exhibits some significant changes from the outline presented in December, or its subsequent modifications. Exhibit 6 presents the Table of Contents which may be compared with the outline shown in

Exhibit 5  
Outline Career Education  
Resource Book

I. Overview of Career Education

- A. Definition
- B. Goals-Outcomes
- C. Elementary School Emphasis
  - 1. self-awareness
  - 2. career-awareness

II. Curriculum Analysis and Modification

- A. Interdisciplinary approach
- B. Learning Stations
- C. Role Playing - work
- D. Evaluation

III. Community Resources

- A. Identification
  - 1. Business, Labor, Industry, Community organization
  - 2. Suggested guidelines for developing and maintaining Community Resources
- B. Effective Utilization
  - 1. Field trips
  - 2. Resource people

IV. Teacher and Commercially Built Materials

- A. Suggestions for using audio-visual equipment effectively  
Examples:
  - 1. Instamatic camera
  - 2. Video take camera, recorder, and monitor
  - 3. Cassette recorder
- B. Suggestions for using films, library books, etc.

V. Evaluation

- A. Teacher designed "tests" of student behaviors-how to write behavioral objectives
- B. Suggested interest tests
- C. Teacher-student performance contracting
- D. Program evaluation (long range-based on outcomes)

VI. Program References and Bibliography

Exhibit 6

Table of Contents - Resource Notebook

Foreword

Acknowledgments

OVERVIEW OF CAREER EDUCATION

Definition

Goals

CURRICULUM ANALYSIS AND MODIFICATION

Interdisciplinary Approach

- Early Level - Sample Unit

Middle Level - Sample Unit

Later Level - Sample Unit

Sample Lessons 1-6

Career Education Activities That Create Interest in Reading

Subject Area Approach

Social Studies

Language Arts

Math

Health and Safety

Science

Economics

Learning Stations - (samples)

Role Playing - (samples)

Interviewing - (samples)

Leisure Time Activities

Exhibit 6 (Continued)

Development of Manipulative Skills in Career Education

COMMUNITY RESOURCES

Resource Person File

Resource Speakers

Senior Citizens as Resource People

Field Trips

USE OF AUDIO-VISUAL MATERIALS

EVALUATIVE TECHNIQUES

Suggested Interest Tests

Program Evaluation

Bibliography

Films

Books

Exhibit 5. It is obvious that a great deal of work has gone into this Guide, and that it contains a compilation of approaches and activities which may be of significant value to the teacher interested in teaching career education in the classroom. However, there are some very significant defects in the present version of this Guide. The most important of these is organizational. There is a woeful lack of transitional and explanatory material which is needed by the reader to understand the contents of the Guide. There is even some difficulty in deciding in which of the sections listed in the Table of Contents one is reading. Much of the volume is made up of the work of obviously different people, inconsistently presented in a variety of formats, with no effort made to explain the differences or identify sources for the various topics presented. There is great variability in the thoroughness with which the various topics are treated. For example, about half a page is devoted to the use of audio-visual materials in career education; whereas five pages are spent on the use of the Field Trip. The amount of space which is devoted to the sample lessons and units appears to be overly long. Finally, some of the topics which were present in the mid-March outline have not appeared in the final draft, or have been sharply curtailed. These were notably in the Evaluation section, and with reference to teacher-made, and particularly commercially available materials.

In summary, the Resource Guide appears to have a great deal of potential value for the teacher interested in career education. However, a great deal of work is still necessary to complete the development, introduce consistency of content and format, and provide a workable organization for this Guide. Thus this Goal has only been partially met.

#### Summary Evaluation of Elementary Component via Interviews

In order to get a "user's" perspective on the elementary component, it was decided that the participating teachers should be interviewed in addition to having discussions with the project staff. These interviews were carried out in the late spring of 1973, in small groups in each of the eight schools participating. A brief interview schedule was used in order to assure that the interview discussions covered all of the topics of interest to the E's. (See Appendix D for the interview form.) The discussion was allowed to range through them in any order and to cover any other topics which may have been on the minds of the teachers. Most of the teachers in the elementary component were interviewed in this process.

The results of these interviews may be summarized briefly as follows:

Most of the teachers felt that career education is something which has been there all along, but that their present efforts strike at career education in greater depth than before. They described it as really a difference in emphasis -- there is more time and attention paid to integrating the career into the curriculum. There are differences focused on the deliberate effort to make the child aware of the possibilities in the world of work, and to emphasize the choices and the values of various careers. Participating in the Maryland Career Education Project has fostered this change in teaching emphasis.

Teachers seemed to feel that children have become quite aware about careers and the world of work and have demonstrated this by wider vocabularies, increased activities, and projects, and more understanding, more expressiveness, more opinions, and more realism about themselves and the world of work. There is general agreement that the Baltimore administration supports career education. There is further agreement that the resource person for the project served a strong function and came whenever she was notified she was needed. However there was some feeling that the coordinator did not have enough time to adequately serve all the schools, and did not have perhaps as much in the way of resources behind her as would have been useful. As is true of many new school programs, there were difficulties in getting appropriate resources.

Most teachers felt that the program was important enough to be continued whether or not there were difficulties in getting appropriate resources.

Most teachers felt that the program was important enough to be continued whether or not there was additional Federal support for it. In general, the consensus was that they plan to continue to teach it; that they would teach it or expand it without additional support; and that all schools and most grade levels should be involved. There were several comments to the effect that teachers not formally involved with the program have picked it up, so that whole faculties have become involved with career education.

The biggest objections seemed to concern priorities and the way in which the program interfered with the previously established schedules. (As always this program has had to compete for the time and attention of the teachers and students with many other programs.) Other problems with the program included the evaluation process wherein teachers felt that they should have had more input to it, and that there should have been more pre-planning for it (E's agree heartily.) The evaluation would have been much more effective had it been incorporated in project planning from the beginning, taking advantage of teacher inputs as well as the inputs of Baltimore administrators. In-service training and workshops were seen as strong plus factors for the program. However more in the way of study guides, more or more frequent workshops, and more in-service training were cited as desirable. Comments and criticisms ranged from "this is a much needed program" to "we need more money, more buses, and more resource persons" to "now they children know why they come to school".

The E's conclude that the net impact of the efforts of the Maryland Career Development Project with respect to the participating teachers has been highly positive. Of course many programs have been seen favorably by teachers without student impact, but few have produced significance gains without teacher support. The MCDP has clearly gained significant teacher support for its elementary programs.

#### Junior High School Component

##### Goal I - Development and Field Test of a Pilot Exploration Model

A. Method - Project staff will draw upon previous work on this project, the Baltimore City Task Force and Career Education, Project Go, Career Exploration Workshops, and the McCormick Plan to produce and implement a model. Plans for field testing will be developed and field testing will be carried out on a representative sample of students from schools 72 and 80. Plans for implementation in 1973-74 will be prepared.

B. Expected results - A developed and field tested model for career exploration at the Junior High School level will be ready for implementation for the school year 1973-74.

### Data collected

On February 15, 1973, project staff supplied an outline for the career education model. Approximately the first of June they supplied a copy of the model itself. E's task was to review the model and its various bases in the Baltimore City Task Force on Career Education, educational objectives, Project Go, the career exploration workshops, and the McCormick plan efforts. A number of comments seem warranted about the model.

First the model is not a model in the scientific sense. It is basically an amalgam of experiences with the Cooperative Work Experience Program at Schools 72 and 80, Project Go, the McCormick plan, the Career Information Resource Center, VIEW, and career development at Lemmel Junior High School. It lacks the explicit statement of principles and relationships which characterizes the scientific model, and which enables the scientific model to be utilized for predictive purposes. It is much more a model in the sense of being a collection of guidelines and suggestions for carrying out career education. From this standpoint the "model" contains a great deal of information which could be useful to the classroom teacher and the administrator who are dedicated to the improvement of career education opportunity. It contains a series of goals and objectives which are drawn heavily from the Baltimore City Task Force, along with some definitions of career education and some suggestions for organization and administration and the involvement of staff, communities, and students. A series of occupational clusters is specified, and these materials are followed by a series of appendices covering some of the activities of the programs mentioned earlier.

A serious defect in the opinion of the E's with respect to this volume is its failure to develop a theoretical framework or structure linking the more or less isolated and unrelated components of the various prior projects on career development. For example, a look at the outline supplied on 15 February indicates that there was to be a section descriptive of a "comprehensive Junior High School career development program". This section is not contained in the career exploration model as it presently exists. It is just such an integrative section, drawing selectively and in integrated fashion on the experiences and characteristics of the variety of programs that form the basis for the career exploration model, which is sorely needed. This defect is offset somewhat by the model's development of goals and a philosophy, and the coordinator (new to the Project this year) did a good job in building these from available sources.

The goal for the Career Exploration Model called for a field-tested model. A part of the development of the Cooperative Work Experience Program, at General Henry Lee was the development of a series of teaching/learning packages under the McCormick program. No field testing of the model per se has been done, with the exception of a very brief field test of one of these teaching/learning package units. It should be pointed out in passing that one of the difficulties in field testing a model of the kind which is presented here is the fact that it has little integral existence of its own, but is rather a collection of these other plans. To some extent these other plans have been field tested in the sense that Project Go for example has been in operation for some time and subject to certain evaluations. Similarly the Cooperative Work Experience Program at Schools 72 and 80 has been in operation and observed for some period of time. But these kinds of field testing are not field tests of the model, and essentially the model itself has not been field tested. Thus, this goal has not been realized, in the opinion of the E's.

The teaching/learning package which was tried out was one of 43 packages (see Exhibit 7 for a list of the teaching/learning units included in the McCormick plan), entitled Pleasant, Positive and Punctual. It was tried out at Rock Glen Junior High School by the author, Mrs. L. Ritter. This tryout took place on 10, 11, and 14 May with 4 classes: a low ability 7th grade, an enriched 8th grade, a 9th grade work study class, and a regular 9th grade. This unit was chosen by Mrs. Ritter because of its appropriate length for a 3-day program, and its apparent suitability as a tryout unit. Observers were invited to watch some of the tryout classes on these three days, and the E's prepared a brief reaction sheet for them to summarize their comments. Questions which were asked on the sheet and the results of the observer's comments are shown in Exhibit 8.

It will be noted that there was a very small number of observers who responded to the reaction sheet, but that they felt in general that the lesson was appropriate in content and reasonably appropriate in level for the students they observed. They felt again that the lesson again was fairly successful in achieving student interest and understanding, and that the process of the lesson should be highly generalizable to other students in other schools. Something over 80% of the respondents approved the production and dissemination of this approach for use in other schools. These observers included teachers, administrators, and an area director.

## CONTENTS OF McCORMICK PLAN

- I. Your Job This Year
  - A. "Passport to Success" (How to work individually)
  - B. "Getting Your Feet Wet" (practicing individualized instruction)
    - 1. Point system
    - 2. Grades
    - 3. Progress reports
- II. You
  - A. "You're Number One" (Your importance)
  - B. "Just For You" (Your needs)
  - C. "Putting It All Together" (You and your goals)
  - D. "A Friend Is \_\_\_\_\_" (You as a Friend)
- III. Why People Work
  - A. "Why Get Up in the Morning" (Socio-personal reasons)
    - 1. initiative
    - 2. pursue interest
    - 3. working conditions and hours
  - B. "Frosting On The Cake" (Economic reasons)
    - 1. insurance
    - 2. pay and pay scale
    - 3. advancement
    - 4. promotion
    - 5. vacation
    - 6. hospitalization
    - 7. pension
    - 8. stock options
- IV. How People Choose Jobs
  - A. "Whatever You Do Counts" (All jobs are important)
  - B. "Looking Around" (Investigation of career areas)
  - C. "Be Prepared" (Education)
    - 1. Academic - Vocational
  - D. "Large and Small" (Kinds of Businesses)
  - E. "The Hunt" (Where to get jobs)
    - 1. classified ads
    - 2. employment agencies
      - a. state
      - b. private

V. Jobs Change

- A. "When America Was Young" (Jobs in the colonial era)
- B. "Farms to Factories" (Jobs during the Industrial Revolution)
- C. "Living Becomes Easier" (recent developments)
- D. "The Crystal Ball" (Trends)

VI. How People Get Jobs

- A. "First Steps"
  - 1. social security number
  - 2. calling for appointment
  - 3. writing a letter for an appointment
- B. "Getting It All Together" (application)
- C. "Put Your Best Foot Forward" (interview)
  - 1. preparing for
  - 2. getting to
  - 3. having

VII. How People Keep Jobs

- A. "Pleasant, Positive, Punctual" (attitudes)
- B. "How Much, How Well" (quantity and quality of work)
- C. "Yours, Mine, Ours"
- D. Responsibilities
  - 1. worker
  - 2. employer

VIII. Observation

- A. "Job Menu" (selecting job at McCormick's)
- B. "Doing Your Thing" (working at McCormick's)
- C. "'Rapping and 'Riting" (follow-up)
  - 1. reactions
  - 2. thank-you letter

IX. The Worker and His Income

- A. "Hateful, But Helpful" (payroll deductions)
  - 1. taxes
  - 2. dues
  - 3. insurance
  - 4. savings, stocks, pension
  - 5. loans

- B. "Slicing the Pie" (budgeting)
- C. "Stretching the Dollar" (consumer education)

X. The Worker and His Family

- A. "What is a Family"
- B. "Togetherness"
  - 1. working together
  - 2. playing together
  - 3. solving problems

XI. The Worker and Leisure Time

- A. "Time Off" (amount of time and things to do)
  - 1. hobbies
  - 2. recreational activities
  - 3. community services
  - 4. vacations

XII. The Worker and His Community

- A. "Your Voice" (civic responsibilities)
  - 1. voting
  - 2. obeying laws
- B. "I Need Help" (useful city agencies)
  - 1. fire
  - 2. police, etc.
  - 3. community
- C. "Be Aware" (keeping informed)
  - 1. media

XIII. The Worker and Current Concerns

- A. "Shooting, Swallowing, Snorting, Sniffing" (drugs)
- B. "Act Now" (ecology)

XIV. Homework

- A. "Your Heritage" (American history)
- B. "What's Happening Now" (current events)
- C. "Curl Up and Read" (reading for fun)
- D. "Be A Detective" (research in interest areas)
- E. "Around The World" (Geography)

## Results for Teaching/Learning Tryout

## OBSERVER REACTION SHEET

## Career Education Project Teaching/Learning Package

## "Pleasant, Positive, and Punctual"

As a part of the Maryland Career Education Project, the Project staff has developed a series of Teaching/Learning Packages covering a segment of the curriculum called the "World of Work." These packages were developed and used at General Henry Lee Junior High School. They were intended to provide career-relevant information and activities for the students participating in the junior high school component of this project which was focused on work-study activities for "high-risk" students in this school. Now the project staff is interested in the possible transferability of these packages to other schools and other levels of students as a part of a more general approach to career awareness.

In order to explore the issue of transferability of these packages, the Project Staff has scheduled a trial demonstration of a single one of the packages, "Pleasant, Positive, and Punctual," at Rock Glen Junior High School on 10, 11 and 14 May 1973. This trial effort is scheduled to be used with four classes: a low ability 7th grade; an enriched 8th grade; a 9th grade work-study class; and a regular 9th grade. Observers have been invited to observe and critique the three sessions scheduled for each of these four classes, particularly with respect to the suitability of the package for the students involved. The attached form is provided so that observers may summarize their observations and comments for the benefit of the Project Staff.

As an aid to observation, it should be noted that four objectives have been established for this particular package:

1. Given a list of jobs, the student should be able to select the proper kind of clothing a person should wear to do his job.
2. The student should be able to identify three kinds of cleanliness by which employers judge employees.
3. The student should be able to write a meaning for the expressions:
  - a. Job knowledge
  - b. Effort
  - c. Job attitudes
4. Given a list of situations, the student should be able to select those that show:
  - a. Good job attitudes
  - b. Good personal relations
  - c. Good safety habits.

## OBSERVERS:

With the above background, please use the attached sheet to record your notes and observations with respect to the class or classes you observed. Please return your comments to the principal, Mr. Donald Knox.

-2-

1. Was the lesson appropriate in content for one or more of the stated objectives?

Yes 8; No 1 (Please explain) \_\_\_\_\_

2. Was the lesson appropriate in level for the students in the class?

Yes 6; No 3 (Please explain) \_\_\_\_\_

3. Did the lesson achieve active participation on the part of the students?

Yes 4; No 2

4. How would you rate the student interest level for this lesson?

Generally high \_\_\_\_\_; Fairly good 9; Generally poor \_\_\_\_\_

5. How would you rate student understanding of the material presented?

Generally high 4; Fairly good 4; Generally poor \_\_\_\_\_

6. Could this lesson be successfully taught by other teachers to other students in other schools?

Yes 8; No \_\_\_\_\_ + one no answer

If not, what would have to be done to achieve a successful transfer to other situations? \_\_\_\_\_

7. With what student groups should such packages be used?

All junior high students 5; work-study groups only 2; Low-ability groups only 2; Other (Please specify): 3 or 4<sup>th</sup>

8. Would you recommend the production and dissemination of this approach for use in other schools?

Yes 5; No 2 (Please explain) \_\_\_\_\_

9. Please offer any further comments you may have as a result of your observations: \_\_\_\_\_

It should be pointed out that the total number of respondents to this reaction sheet was only 9 and that the tryout was comprised of 4 classes taking one out of 4 units. There is no way that this can be considered an adequate tryout of the methodology which went into the development of the model, or of the model, or of the teaching/learning packages as a set.

Nonetheless it is only fair to say that the reactions of the teachers and observers were generally positive toward the teaching/learning units and their potentialities.

In the E's opinion, it would be dangerous to proceed to generalize this "model" to the entire Baltimore School System on a full implementation basis at this time. Much more in the way of tryout and evaluation of the teaching/learning units needs to be done under more controlled conditions. This would permit the evaluation to provide to the unit's developers, and to the teachers, positive suggestions regarding the implementation and improvement of such units. If further use is made of the teaching/learning units in the McCormick plan idea without further controlled testing, it should only be done on a step-by-step basis which would allow operational experience to build up and to be incorporated into the materials and their application.

Goal II - Student impact of work oriented programs

A. Method - Students in Schools 72 and 80 will be exposed to a work-oriented program through their respective schools.

B. Expected results - Students will exhibit improved attendance and school achievement.

Data collected

Complete descriptions of the programs at the two schools have been included in Appendix A. Grade and attendance data are given below, along with a summary of employer ratings.

Table 9 lists the participation of the students in School 72, along with attendance data and grade data for each student. It will be noted that 11 were 9th graders (all but 1 male); 3 were 8th graders (all but 1 male); and 7 were 7th graders (all male). As the program began the year with 28 students, 7 have dropped out of the program for various reasons. There has not been much success in including girls in this program at this school. Also, it should be noted that each of the students on the list in Table 9 worked as a stock person. There was a variety of offices and employers represented

Table 9  
Cooperative Work Experience Program  
School 72

Student	Sex	Grade Level	Absences*		Grades*†		Job
			'72	'73	'72	'73	
R.B.	M	9	62	42	S	S	Hardware Stock Boy
W.B.	M	9	6	19	S	S	Restaurant Stock Boy
D.B.	M	9	5	35	S	S	Restaurant Stock Boy
W.G.	M	9	7	1	S	U	Grocery Stock Boy
S.H.	M	9	6	9	S	S	Shoe Sales Stock Boy
M.M.	M	9	20	20	S	U	Shoe Sales Stock Boy
E.M.	M	9	50	42	S	U	Dry Goods Stock Boy
C.N.	M	9	41	5	U	S	Dry Goods Stock Boy
R.R.	M	9	45	21	S	S	Grocery Stock Boy
C.S.	M	9	6	13	S	S	Loan Office Stock Boy
L.S.	F	9	100	12	U	S	Dry Goods Stock Girl
C.F.	M	8	-	22	S	S	Grocery Stock Boy
D.T.	M	8	15	2	S	U	Grocery Stock Boy
M.W.	F	8	22	49	S	S	Grocery Stock Girl
S.C.	M	7	-	-	-	S	Produce Stock Boy
J.H.	M	7	-	-	-	U	Hardware Stock Boy
J.M.	M	7	-	-	-	-	Furniture Stock Boy
C.A.	M	7	45	30	S	S	Grocery Stock Boy
W.J.	M	7	18	46	S	U	Shoe Store Stock Boy
D.M.	M	7	48	34	S	S	Furniture Stock Boy
C.M.	M	7	50	62	S	S	Grocery Stock Boy

\* Based on first three quarters of each year. Blanks are missing data.

\*† Numerical grades were converted to letters (S = 60 and up) to make them comparable to letter grades.

on the list, but the variety and distinction of the job activities engaged in by the students is very poor.

Participants in this program in School 80 are shown in Table 10 where all of the participants were 9th grade students and there were 21 boys and 18 girls out of an initial group of 42 participants. There was a much wider variety of job activities at this school, though the jobs were of course all low, entry level jobs in nature. There was much greater participation by girls.

The major objectives of this Goal of the work study programs was to impact students in the form of improved attendance and improved achievement. E's have been able to collect some relevant data, as shown in the Tables, (Attendance and grade data for the years 1971-1972 and 72-73 are based on only the first three quarters of each year, since the fourth quarter of 1972-73 was not yet available at the close of data collection.)

Some summary statistics were done on the attendance data for the two schools. These statistics were done to compare absentee rates for 1972-73 with the like period for 71-72. For these calculations, only those students for whom both sets of data were available were used. The analysis showed that with respect to School 72 there was a mean decrease in absence of approximately 6 days per student. However, there was an extremely large standard deviation around this mean (about 30 days) for the 17 students with complete data in the calculation. Thus, the application of Student's "t" to these data indicated that the mean decrement in the absence figures was not significant at the 5% level. The application of the Sign Test also showed no significant improvement in attendance (9 of the 17 students improved in attendance while 6 showed no improvement). In essence, these figures indicate that at School 72 the impact of the program on attendance for 1972-73 as compared to 1971-72 was not significant. Of course it must be remembered that the program may indeed have had significant impact on selected individual students.

At School 80, using the 32 students with complete data, the mean decrement in absence was 6.9 days per student (with a substantially smaller standard deviation of approximately 17 days). The analysis of Student's "t" here showed a significant decrease in absence at almost the .01 level of significance. This decrease was supported by the Sign Test at approximately

Table 10  
Cooperative Work Experience Program  
School 80

Student	Sex	Grade Level	Absences*		Grades**†		Job
			'72	'73	'72	'73	
S.C.	M	9	50	28	P	F	Gas Station (Maintenance)
A.E.	M	9	7	9	G	F	Pharmacy (Maintenance)
P.H.	M	9	57	37	D	G	School Supply
J.H.	M	9	17	4	P	F	Lunch Counterman
D.J.	M	9	49	27	P	D	Library Page
M.M.	M	9	22	38	F	P	Gas Station
M.N.	M	9	6	6	G	G	Gas Station
R.O.	M	9	19	10	P	F	Tire Co. (Maintenance)
A.S.	M	9	46	43	P	D	Fruit Stall Helper
D.T.	M	9	45	3	F	G	Gas Station
R.S.	M	9	2	5	P	G	Gas Station
J.T.	M	9	20	16	P	F	Gift Shop Sales
T.W.	M	9	5	4	G	G	Gas Station
B.W.	M	9	8	2	F	G	Lunch Counterman
T.J.	M	9	-	-	-	-	Pharmacy
T.L.	M	9	10	3	F	G	None
W.J.	M	9	-	19	-	P	None
Z.C.	M	9	-	16	-	F	None
M.A.	M	9	-	32	-	F	Gas Station
R.S.	F	9	-	5	-	F	Gas Station
D.B.	F	9	16	9	F	G	Sales
M.B.	F	9	3	6	F	G	Laundry Aide
M.B.	F	9	39	43	F	P	Sales, Sample Shop
B.C.	F	9	29	37	F	F	Department Store Sales
M.M.	F	9	50	30	F	P	Shoe Store Sales
Y.E.	F	9	5	3	G	G	Shoe Store Sales
C.S.	F	9	31	13	F	G	Laundry Aide
C.H.	F	9	34	26	P	F	Shoe Store Sales
J.H.	F	9	16	18	P	G	Laundry Aide
D.J.	F	9	8	9	P	F	Laundry Aide

Table 10 (Continued)

Student	Sex	Grade Level	Absences*		Grades*+		Job
			'72	'73	'72	'73	
N.L.	F	9	34	11	P	G	Shoe Store Sales
B.M.	F	9	14	5	G	G	Sales
M.S.	F	9	22	33	F	F	Nursing Home Aide
T.S.	F	9	28	18	P	G	Food Store Sales
K.S.	F	9	8	0	F	F	Shoe Store Sales
B.T.	F	9	68	16	P	G	Shoe Store Sales
P.G.	F	9	7	52	D	D	Nursing Home Aide
R.S.	M	9	-	91	D	D	--
K.W.	M	9	-	10	P	F	Labeling Specimens

\* Blanks are missing data. Based upon first three quarters of each year.

\*+ Numerical grades converted to letters for comparability @ 90-100-E; 80-89-G; 70-79-F; 60-69-P; and 59 and below -D.

5% level. Thus, at School 80 it would appear that there was a significant impact of the program on attendance on the classes taken overall (and again, the program may have had significant impact on selected individuals).

The tables also provide the data for the analysis of grades for the two schools. The E's would like to point out that the grade data for 1971-72 and 1972-73 lacks comparability to a considerable degree. Only the crudest of comparisons is possible under these circumstances. Not the least of the difficulties encountered is the switch from numerical grades to letter grades which took place over the past year. In view of these difficulties, comparisons were made between the two years simply on the basis of improvement versus no improvement. Improvement was defined as a change in level of grade by one or more letters, or with respect to the S/U situation, a change in status from S to U or vice-versa. Examined in this fashion, it can be seen that the program had no measurable impact with respect to school 72, the bulk of the students showing no change in grade level from year to year. With respect to school 80 the results were somewhat more encouraging, but not significantly so; 17 students showed improvement in grade level by at least 1 letter value, while 14 showed no improvement. The only conclusion which is possible on the basis of these crude grade data, is that the program made no overall impact on student achievement from 1971-72 to 1972-73. Again of course significant impact may have occurred with respect to individual students.

One final analysis was performed on the grades and attendance data. A four-fold table was constructed to classify students from both schools together into "improved" versus "not improved" on these two characteristics. The Phi-coefficient which resulted from this calculation was .32, indicating a slight tendency for grade improvement to be associated with attendance improvement for these students. This coefficient was significant at approximately the 5% level.

#### Employer Rating Cards

The program was highly successful in gaining the cooperation of local businessmen as employers for the students. There were 12 employers working with School 72 and 10 with School 80 who provided jobs for the students.

Each of the students in the junior high school Cooperative Work Experience Program was rated by his employer according to a list of skills and work habits and personal traits as shown in the card format in Appendix D. In addition, the employer was asked to give the student a general rating in the area of skills and work habits, personal traits, punctuality, and attendance.

The E's have summarized the general ratings by school for the last year using the code of 4, 3, 2, 1 to respectively represent the category designations on the card of "superior", "good", "fair", and "poor". The results of these summaries are shown in Table 11. Here it may be seen that School 80 was superior to School 72 with respect to each of the 4 categories and that average ratings for the 4 categories ranged only from 2.71 to 2.76. (These average ratings are not particularly high, all being less than good, and running from half-way between fair and good to nearly good.)

Again E's regret that no comparative data is available to indicate whether or not attitudes as seen by employers has changed over the period of the last year. It is clear that this is a critical area for the success of the individual in the world of work, and it is equally clear that many of the students in this program have not yet reached a level of development with respect to these kinds of characteristics which would make them really acceptable employees to the average employer. It is of course exactly here where the program has an opportunity to make a great contribution by providing the student with on-the-job experience in a non-hostile, supportive atmosphere. However, it is not possible to say from these data how well the program has functioned in this respect.

It would appear that the project has been only moderately successful in achieving the goal of reducing absenteeism and not successful in improving the achievement level of the students participating in the junior high school Cooperative Work Experience Program. It is quite likely that significant gains in these respects have occurred for individual students, but the effects are not strong enough to produce strong improvements in the groups as a whole. The absenteeism figures show a continuation of the decline noted in previous evaluations however, which is presumptive (though not significant) evidence of a continued positive effect of the program on absenteeism. The crudeness of the grade evaluation (engendered by changes in the grading system) leaves it a moot question as to whether or not favorable impact on achievement, as reported by previous evaluation, continued during 1972-73.

Table 11  
Average Employer Ratings\* of Student Employees

	Skills and Work Habits	Personal Traits	Punctuality	Attendance	Average <sup>+</sup>
School 72	2.59	2.63	2.54	2.50	2.56
School 80	2.93	2.78	2.98	2.91	2.90
Average <sup>+</sup>	2.76	2.71	2.76	2.71	2.73

\* According to the following scale:

Superior - 4; Good - 3; Fair - 2; and Poor - 1.

+ Unweighted.

Goal III - Provision of Teaching and Learning Packages to Schools 72 and 80

A. Method - Project staff will create or select teaching/learning packages relating subject content areas to one or more career clusters for specified teachers in Schools 72 and 80.

B. Expected results - Needs more specification. At present only that it will be done.

Data Collected

The amorphous nature of this goal has resulted in a considerable difficulty in specifying the data to be collected. E's expected to identify a list of teachers, subject matter areas, career clusters, criteria for selection of materials, objectives, and plans for developments of the packages. Basically none of these things has actually been identifiable. What has been identified is a listing of the 43 packages included in the McCormick Plan (see Exhibit 7 ). It would appear that the development of these materials has been almost entirely the work of one individual, who has developed them as she has gone along in working with students at School 72, and who has developed them in response to her own perception of the needs of the students with respect to subject matter and materials.

The packages have not been used by any other teachers than the developer. Presumably, they are potentially available to other teachers who may wish to use them, and there is a certain degree of advocacy for distributing them to other teachers in the system (see discussion on the Career Exploration Model).

It is clear that the effort behind these 43 teaching/learning packages represents a great deal of investment of time and effort, undertaken with a considerable degree of sensitivity for the needs of this particular group of students. However, most of the objectives listed at the beginning of the evaluation project have not been met in the sense that the process objectives of distribution and tryout by specified teachers and the development an statement of explicit criteria for the selection of materials, content, and career clusters have not occurred. Thus, in summary, the 43 teaching/learning packages represent an impressive achievement, the net effect of which is indeterminate at the present time.

Goal IV - Counselor In-Service Training

A. Method - Provide a one day in-service program for 60 Baltimore City Junior High School counselors on the contributions necessary to effective career guidance programs.

B. Expected results - 60 specified Junior High counselors will have taken part in the one-day program and made a minimum of 10 recommendations each considering their perceptions of career guidance as a component of a system-wide career education program. Recommendations will be incorporated in the Career Exploration Model.

Data Collected

Again, this evaluation was more of a process evaluation than anything else, with emphasis on determining that the project staff had indeed carried out its plan to conduct the in-service program. A workshop primarily for counselors was held on 31 October 1972, before the E's had officially begun their evaluation effort. The agenda is shown in Exhibit 9. Contrary to plan, the project staff did not derive 10 recommendations from each individual, but rather collected a series of composite recommendations from various discussion groups. These composite recommendations and comments were indeed included in the Career Exploration Model as it was presented to the E's.

Reactions of the participating counselors to the workshop, and also some reactions collected from nonparticipating counselors, are summarized in Exhibit 10. Here it may be seen that both types of counselors agreed on the extreme significance of career education, as well as guidance and counseling. The final part of this Exhibit also shows some of the statements of the counselors with respect to functions that counselors may perform in a career education program. There is an expected degree of parallelism between the statements of attending counselors and non-attending counselors, though the attending counselors have made some statements which are obviously specific to the information supplied to them as part of the workshop.

In addition to the responses shown in the above Exhibit, attending counselors were also asked to respond to certain aspects of the workshop on an assessment sheet. There were approximately 90 counselors on the attendance list, and the frequencies displayed in Exhibit 11 show that a number of them did not attend some of the sessions, and/or did not fill out the assessment sheet. However Exhibit 11 shows the reactions of those who responded to the assessment sheet with respect to the various portions of the program. The well known generosity effect is evident in most of the ratings shown in this Exhibit. There was little question that the group accepted the importance

Exhibit 9  
Maryland Career Education  
Development Project Workshop

P R O G R A M

Tuesday, October 31, 1972  
Lake Clifton Senior High School  
2801 St. Lo Drive

Theme: Career Education - A Concept Unifying School, Home and Community

Objectives: To develop an understanding of the philosophy, goals and objectives of Career Education

To identify the responsibilities of Junior High School Counselors in implementing a program of Career Education

- 8:15 - 8:30 Registration
- 8:30 - 8:45 Opening - Mr. Clarence Gittings, Assistant Superintendent, Special Projects -- Statement of Purpose
- 8:45 - 9:00 Greetings - Dr. Joel Carrington, Assistant Superintendent Secondary Education
- 9:00 - 9:20 Review of Procedures - Nancy L. Whittaker, Staff, Maryland Career Development Project  
Pre-Test
- 9:20 - 9:25 Introduction of Keynote Speaker - Mrs. Nancy Pinson, Assistant Director, Maryland Career Development Project
- 9:25 - 10:00 Keynote speaker - Dr. Kenneth Hoyt - Professor of Education, University of Maryland  
Topic: Career Education - Its Philosophy, Goals and Objectives
- 10:00 - 10:15 Break
- 10:15 - 10:45 Panel Discussion: "Career Education in the Junior High School - The team as a Key"
- Moderator: Dr. Benjamin Whitten, Area Superintendent, Vocational Education
- Panelists: Mrs. Sallie Russell, Counselor, Calverton Junior High School  
Mr. Frederick Eyster, Supervisor, Guidance  
Dr. Elaine Davis, Educational Assistant to the Superintendent  
Dr. Robert C. Lloyd, Assistant Superintendent, Pupil Personnel Services  
Mr. Morton Esterson, Assistant Superintendent, Special Education  
Mrs. Elizabeth Adams, Principal, Rock Glen Junior High School

Exhibit 9 (Continued)

- 10:45 - 11:30 Discussion (Questions and Answers)
- 11:45 - 12:45 Lunch -- Room D 200
- 12:45 - 12:50 Presenting Dr. Kenneth Hoyt - Mr. Niel Carey, Director,  
Maryland Career Development Project
- 12:50 - 1:15 Dr. Kenneth Hoyt -- Topic: Junior High School Counselors'  
Responsibilities in Career Education
- 1:15 - 2:15 Discussion - Demonstrated Junior High School Counselor  
Leadership role in existing Career related  
programs  
Moderator - Mr. Niel Carey, Director, Maryland Career  
Development Project  
Participants - Interest Test - Mr. Leon Lerner, Counselor  
General Henry Lee Junior High School  
Project GO - Mrs. Charlotte Malone, Coordinator  
Project VIEW - Mr. George Kammerer, Coordinator  
Inter-Disciplinary Planning in the Junior  
High School - Mrs. Joan Tillery -  
Counselor, William H. Lemmel Junior  
High School.  
Mr. Maurice Schreiber, Principal -  
General Henry Lee Junior High School
- 2:15 - 3:00 Group Sessions - List significant contributions that counselors  
can make in implementing a program of Career Education
- 3:00 - 3:30 Group Reassemble
- Group Reports  
Post Test  
Adjournment

NOTE: Group leaders, Department Heads will meet immediately after  
adjournment

Career Education Workshop For Junior High School Counselors

An Evaluation

From

Counselors Attending

Counselors Not Attending

and

Questions

- I. To what degree is career education a important part of the educational program
- II. To what degree is guidance and counseling an important part of the career education program
- III. List three specific activities or functions that counselors may perform in a Career Education Program

ATTENDING COUNSELORS

NOT ATTENDING COUNSELORS

Question No.	Responses	Responses
I. of greatest importance	7	of greatest importance 5
of some importance	1	of some importance 2
of little importance	0	of little importance 0
II. of greatest importance	6	of greatest importance 6
of some importance	2	of some importance 1
of little importance	0	of little importance 0

ATTENDING COUNSELORSQuestion No. III

1. Supply students with information and interpretations regarding themselves.
2. Counseling for the improvement of self concept and raising aspirations and understanding of self concept.
3. Proving materials relating to careers or colleges

1. Disseminating information
2. Assisting with career related programs

3. Acting as resource people to teachers and classes

1. Conduct career seminars, interest surveys, college tours, and industry visits

2. Supervise use of VIEW system

1. Develop and maintain a Resource Center

2. Assist with the coordination of a school wide career education program

1. Assist with the coordination of such programs as :  
Project Go and VIEW

2. Provide Resource Materials

3. Conduct group counseling sessions

NOT ATTENDING COUNSELORS

1. The counselor should expose students to the world through resource material (films, slides, pamphlets etc) and persons.
2. The counselor can ascertain student interests, and make them aware of careers to which their interests could lead.
3. The counselor can encourage, where possible, the exploration of interests through subject areas (required and elective)

1. Provide information on careers

2. Assist pupils in finding jobs

3. Give guidance on getting and keeping job

1. Groups guidance sessions on career goals

2. Serve as resource to teachers working on career education projects

3. Serve a catalyst in developing career education project school - wide

1. Interest testing with follow-up of related career projects

1. Conduct group counseling sessions, group guidance sessions, and role playing

ATTENDING COUNSELORS

NOT ATTENDING COUNSELORS

Question No. III

1. Plan assembly programs and assisting with resource material and people
2. Conduct tours to business and industry, college etc.
3. Conduct group counseling sessions

1. Assist classroom teachers to incorporate career education in classroom activities (curriculum)
2. Assist with curriculum changes or modification
3. Assist students in bridging the gap between school and industry (Work)

1. Individual counseling on careers
2. Classroom visitations, conduct group guidance and counseling sessions.
3. Present assembly program on the world of work.

1. Assist in exposing students to career opportunities
2. Keep abreast of career opportunities
3. Solicit the aid of teachers and administrators in working with career exploration

Exhibit 11

October 31, 1972

ASSESSMENT SHEET

(Compilation)

Part I

Code for Point Scores

Directions: Please check those ratings that describe your assessment of the workshop in terms of its value

- 5. Extremely valuable
- 4. Valuable
- 3. Moderately valuable
- 2. Of little value
- 1. Not appropriate

N/R - No Response

A.M. Session

P.M. Session

	5	4	3	2	1	N/R
Keynote Speaker	26	22	11	4	0	2
Panel Discussion	21	19	20	5	0	0
Question/Answer	19	26	13	6	0	1

	5	4	3	2	1	N/R
Dr. Hoyt's Presentation	29	21	8	4	0	2
Discussion of Programs	18	17	18	2	0	9
Group Sessions	10	16	7	2	1	24

Which of these categories best describe your perception of the importance of Career Education in the total educational program? (Please check.)

	5	4	3	2	1	N/R
	32	19	8	2	1	3

Part II

As a counselor, how would you describe your role in Career Education's implementation in your school? (Check.)

	Develop and conduct self awareness programs	Consultant in staff and curriculum development for Career Education	Coordinate home and community resources for Career Education	Other (Describe)	All of these
	8	14	8	See compilation attached Sheet Number 1.	34

N/R = 5

General Reaction to Workshop: (Use Code Point Scores from Part I.)

	5	4	3	2	1	N/R
	18	25	17	0	0	5

Comments: See Compilation Attached Sheet #2

of career education, close to half of those responding ranking career education at the most extremely valuable end of the scale. The modal response on general reactions to the workshop was that it was valuable. However it should be noted that a healthy portion of the group in some cases responded that the presentations were of moderate value as opposed to valuable or extremely valuable. In summary this assessment suggests that there is a high appreciation of the value of career education, that the workshop was well received in general, and that speaker presentations, panel discussions, and question and answer sessions were seen as more valuable than discussion or group sessions.

A second workshop was held in connection with the Secondary, Vocational and Adult Divisional Conference on 20 March 1973 at the Baltimore Hebrew Congregation in Park Heights. The agenda for this meeting is shown in Exhibit 12, and the roster of participants included over 30 administrative personnel.

Technically this workshop was not a part of the program to be evaluated by the E's, since the Goal was focused on counselors not administrators. However, a brief assessment sheet was collected by the project staff in connection with the workshop, and the results are shown in Exhibit 13. The important finding in connection with this workshop was the strength of opinion associated with the statement that the Baltimore City Public Schools should invest more effort in career education. The results show that the administrators attending this workshop are strongly behind and committed to increased effort in career education. Favorable but not so extremely favorable results were obtained in response to the statement that the workshop provided a great deal of the participants which was applicable to their own situations, and the statement that something new about career education was learned as a result of the workshop.

Thus, it appears that the objectives of Goal IV were met.

#### Summary

In general, it would appear that the junior high component has achieved certain of its goals. A Career Exploration Model of a sort has been created, and over 40 teaching/learning packages have been created in connection with the McCormick plan. The indicated workshops have indeed been held, and have been favorably received by their participants. A functional work-oriented program has been established at two pilot schools.

Of these various accomplishments, it would appear that the workshops were the most successful. This is possibly true because the project staff is

SVA DIVISIONAL CONFERENCE ON CAREER EDUCATION  
BALTIMORE CITY PUBLIC SCHOOLS  
AND  
MARYLAND STATE CAREER DEVELOPMENT PROJECT (K-ADULT)  
BALTIMORE HEBREW CONGREGATION  
PARK HEIGHTS AND SLADE AVENUES  
MARCH 20, 1973

A G E N D A

- 8:30- 9:00 a.m. Registration and Coffee
- 9:00- 9:10 a.m. Introduction of Guest Speaker: Dr. Joel A. Carrington  
Acting Asst. Supt.  
Secondary Education
- 9:10- 9:30 a.m. Keynote Address: Dr. Vernon S. Vavrina  
Associate Superintendent  
Curriculum and Instruction
- 9:30-10:15 a.m. Symposium: Moderator. Mrs. Carolyn W. Boston
- Participants: Dr. Theodore Rybka  
Mr. Leonard Rosenberg  
Mr. Reginald Lawrence  
Mrs. Audrey Allen  
Mrs. Mildred Kington  
Mr. Malcolm Dutterer  
Mr. E. Niel Carey  
Mrs. Charlotte Mebane  
Mr. Curtis Dove  
Miss Portia Pinkney  
Mr. George Mitchell.
- 10:15-10:45 a.m. Question and Answer Period
- 10:45-11:00 a.m. Break
- 11:00-12:00 Noon Task Force Model For Career Education Workshops
- 12:00- 1:00 p.m. Lunch
- 1:00- 1:30 p.m. Film: "Vocational Education-Baltimore Style"  
Introduced by: Dr. Benjamin Whitten  
Area Superintendent  
Vocational Education
- 1:30- 1:45 p.m. Career Education As A State Priority: Mr. Niel Carey  
Director, Maryland  
State Career  
Development Project  
(K-Adult)

Exhibit 12 (Continued)

1:50- 3:00 p.m. Existing Programs with Implications for Career Education:

Maryland Career Development Project (K-Adult)  
Project Go  
Cooperative Education and Placement Programs  
Direct Search for Talent (DST)  
Recruitment Task Force (RTF)  
Interdisciplinary Approach to Career Education  
Mrs. Elizabeth Edmonds, Asst. Principal  
School #79  
Mr. Oscar Helm, Principal, School #70  
Mr. Maurice Schreiber, Prin., School #72  
Mrs. Anne O. Emery, Prin., School #411

3:05- 3:20 p.m. Overview of Maryland State Career Development Project  
(K-Adult): Mrs. Charlotte Mebane

3:20- 3:30 p.m. Summary and Implications for The Future:  
Dr. Joel A. Carrington  
Acting Assistant Superintendent  
Secondary Education

3:30 p.m. Evaluation

3:40 p.m. Adjournment

Exhibit 13

SVA Divisional Conference on Career Education  
Baltimore City Public Schools  
and  
Maryland Career Development Project (K - Adult)

Career Education Workshop  
March 20, 1973

A S S E S S M E N T   S H E E T

(Compilation)

- I. I feel that I received a great deal out of the workshop. I expect to apply information gained to my own situation.
- | <u>Strongly Agree</u> | <u>Agree</u> | <u>No Opinion</u> | <u>Disagree</u> | <u>Strongly Disagree</u> |
|-----------------------|--------------|-------------------|-----------------|--------------------------|
| 17                    | 37           | 5                 | 10              | 2                        |
- II. The Baltimore City Public Schools should invest more effort in Career Education.
- | <u>Strongly Agree</u> | <u>Agree</u> | <u>No Opinion</u> | <u>Disagree</u> | <u>Strongly Disagree</u> |
|-----------------------|--------------|-------------------|-----------------|--------------------------|
| 41                    | 27           | 1                 | 2               | 0                        |
- III. I think that Career Education is theoretically important, but it doesn't apply to me.
- | <u>Strongly Agree</u> | <u>Agree</u> | <u>No Opinion</u> | <u>Disagree</u> | <u>Strongly Disagree</u> |
|-----------------------|--------------|-------------------|-----------------|--------------------------|
| 2                     | 3            | 2                 | 31              | 33                       |
- IV. I feel that I learned something new about Career Education.
- | <u>Strongly Agree</u> | <u>Agree</u> | <u>No Opinion</u> | <u>Disagree</u> | <u>Strongly Disagree</u> |
|-----------------------|--------------|-------------------|-----------------|--------------------------|
| 17                    | 40           | 2                 | 9               | 3                        |

familiar with the process of preparing and holding workshops. The other developments, having been somewhat more innovative, have had somewhat less clear salutary impacts. The Career Exploration Model and/or the teaching/learning packages are not yet to a point where full implementation is warranted on the basis of empirical and objective field results. This is not to say that the teaching/learning packages and/or the career exploration model are necessarily inadequate or inconsistent, but simply that the project staff has not yet been able to bring them to the test. For example, the tryout of the sample lesson of the teaching/learning packages was quite favorably received by those who observed it, but represents only a single unit from more than 40, tested in a single school over single three-day period. In the opinion of the E's, the career exploration model needs additional work in the form of theoretical structure, coordination, and coherence to tie it together into something more than a collection of more or less miscellaneous pieces.

With respect to the work-oriented program carried out in two schools during this last year, the results seemed somewhat disappointing. There was no discernable effect at either school on academic grades perhaps due to the crudity of the grade measure. At the better of the two schools, there was a barely significant reduction in absenteeism. With a non-significant reduction in absenteeism in the other school (though the favorable trend noted by previous evaluators appeared to continue). Finally, it should be noted that a number of persons dropped out of the work-oriented programs over the period of the year, and that those that remained in the program did not receive particularly high ratings from their employers with a respect to their general, job-related skills, such as work habits, personal characteristics, punctuality and attendance on the job. The E's also observed that students appeared to be interested and informed with respect at least to the materials contained in the various teaching/learning packages taught to them in one of the schools. It is impossible to state the extent to which this was a function of teacher personality and teacher approach, and to what extent it was a function of the materials which are being used.

In summation, the impact of the program was less demonstrable in terms of student attendance and achievement than in terms of favorable impressions created. However some positive effects were evident, with the likelihood that the availability of more precise measures might have strengthened the results.

### Senior High Component

#### Goal I - Establishment of Prototype Career Information Center

A. Method - Project staff will establish a prototype occupational information center at Southern High School, Baltimore, comprised of the VIEW system, its related equipment, and information regarding educational and local occupational opportunities.

B. Expected results - The center will be used by students of Southern High, and teachers and counselors of Southern and other secondary schools. Other secondary schools may establish similar centers.

#### Data Collected

E's were instructed to limit their concern to Southern High School. The program description for the Center at Southern High School is to be found in Appendix A. In addition to developing a program description, E's planned to develop a procedure for monitoring the usage of the Center by means of a usage card. Exhibit 14 shows the VIEW use card. A supply of these cards was provided for the Southern High School Center in early December. It was requested that they be placed in a permanent place along with the request that they be filled out by those students using the VIEW machine. Announcements in classes and by counselors were also requested. Table 12 shows the results of the VIEW use card from its inception in early December to 22 February when filled-out cards were collected for a preliminary report. The collection of VIEW use cards was discontinued after this time (unbeknown to the E's) so that no use data is available after approximately the end of February.

The table shows a scattered use of the VIEW system over the period in question by 131 students. These students examined an average of 3-4 VIEW cards and printed out an average of 2-3 of them. In general, their response to the system was favorable. It may be noted that a substantial number of the students responding through the use of this card agreed that the career information center (i.e. the VIEW machine) "meets my needs for information about

Exhibit 14

NAME (OPTIONAL)		DATE	SEX M _ F _
HOW MANY VIEW CARDS DID YOU EXAMINE?	FROM HOW MANY VIEW CARDS DID YOU GET A PRINTOUT?	HOW MANY VIEW CARDS CONTAIN OPPORTUNITIES THAT YOU WANT TO FIND OUT MORE ABOUT?	
CHECK THE BOX THAT SHOWS HOW YOU FEEL ABOUT EACH STATEMENT BELOW.			
THE CAREER INFORMATION CENTER MEETS MY NEEDS FOR INFORMATION ABOUT OCCUPATIONAL OPPORTUNITIES VERY WELL.		THE CAREER INFORMATION CENTER MEETS MY NEEDS FOR INFORMATION ABOUT EDUCATIONAL OPPORTUNITIES VERY WELL.	
STRONGLY AGREE	AGREE	DON'T KNOW	DISAGREE STRONGLY DISAGREE
STRONGLY AGREE	AGREE	DON'T KNOW	DISAGREE STRONGLY DISAGREE
PLEASE PUT COMMENTS ON OTHER SIDE			

Table 12

Summary of Information Gathered  
On VIEW Use Cards - Southern High School

~~12/11/72--3/8/73~~

Total number of students using VIEW machine = 131					
Total number of males using VIEW machine = 72	10 students did not respond to these items)				
Total number of females using VIEW machine = 49					
Schedule of Use:					
12/11 - 1	12/? - 1	1/15 - 0	1/26 - 1	2/7 - 1	
12/12 - 3	1/2 - 2	1/16 - 1	1/29 - 0	2/8 - 4	2/19 - 3/10 - 0
12/13 - 10	1/3 - 1	1/17 - 2	1/30 - 0	2/9 - 3	2/? - 1
12/14 - 0	1/5 - 8	1/18 - 0	1/31 - 0	2/12 - 3	3/8 - 1
12/15 - 6	1/8 - 1	1/19 - 4	1/? - 1	2/13 - 1	No date - 25
12/18 - 0	1/9 - 3	1/22 - 1	2/1 - 0	2/14 - 0	
12/19 - 6	1/10 - 4	1/23 - 1	2/2 - 1	2/15 - 1	
12/20 - 7	1/11 - 0	1/24 - 0	2/5 - 0	2/16 - 1	
12/21 - 9	1/12 - 4	1/25 - 4	2/6 - 8		
Total Number of VIEW cards examined = 437					
Total Number of cards from which printouts were made = 329					
Total number of view cards containing opportunities students want to find out more about = 306					
Total number answering the following questions with each option:					
1. The Career Information Center meets my needs for information about occupational opportunities very well.					
Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree	
37	66	23	3	2	
2. The Career Information Center meets my needs for information about educational opportunities very well.					
Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree	
32	54	38	6	2	

educational opportunities very well." All of the VIEW cards in the files at the ~~present time are occupational rather than educational; no educational cards have~~ yet been prepared. However, these responses reflect on the fact that many occupational cards contain information about the educational requirements of the occupation. Thus this apparent discrepancy does not appear to impugn the validity of the occupational responses:

A survey conducted for the E's by the VIEW coordinator is shown in Exhibit 15. This shows that most of the junior high schools in the area had their VIEW machines operating and that they were used at least to some degree (though no use statistics were kept). It further indicates that approximately 175 12th grade students in Southern High used the system, and that 375 did not. (This would suggest that the data on VIEW usage obtained through the VIEW use cards may have underrepresented actual usage as a function of the fact that the cards were discontinued (by the staff) near the first of March and/or that the cards were not actually filled out by some of the students using the system as a result of lack of monitoring by school staff.) The fact that 700 students in the 10th grade used the VIEW system is not an indicator of volunteer usage, and is partially a function of the fact that these were essentially demonstrations organized as part of the students' classes.

Finally, there is some discrepancy in the estimated amount of use of the VIEW machine according to school staff as opposed to data collected by the E's. School staff estimated that approximately 600 Southern students used the VIEW machine during the school year during 1972-73. The E's could find no substantiation of this figure either in terms of the VIEW use cards or in terms of any other source of data (including the Project Coordinator).

With respect to the development of the system, the system coordinator (who was new to the Project this year) reports that he has spent a great deal of his time during the past year attempting to do a "public relations job" with the respect to the other schools having VIEW equipment. This is not technically included in the goal which is currently being discussed, but however apparently has assumed a great deal of operational importance. In fact, this effort has to some extent constituted an inservice training experience which will undoubtedly prove valuable. In addition, the coordinator has developed clusterings of the VIEW cards to relate the occupations covered to the 15 USOE occupational clusters and the Kuder Interest Inventory.

The remaining effort has been spent on developing some VIEW cards. At the beginning of the school year there were approximately 72 "occupational"

BALTIMORE CITY PUBLIC SCHOOLS  
 DIVISION OF GUIDANCE AND PLACEMENT  
 2418 St. Paul Street  
 Baltimore, Maryland 21218  
 May 2, 1973

To: Dr. David B. Orr, Evaluator  
 Maryland Career Development Project

Subject: VIEW Use Survey 1972-1973

From: George A. Kammerer, Jr., Coordinator VIEW

School Number	School Name	Location of VIEW Reader-Printer	Has VIEW been used in 72-73 Guidance program?	Is VIEW useful to students when using it on their own?
# 41	Hamilton Jr. High	Guidance Office	Yes	Yes
# 42	Garrison Jr. High	Guidance Office	Yes	Yes
# 43	Hampstead Hill Jr. High	Art Rm.	No, Career Inf. rm. taken away.	Yes, based on 71-72 use.
# 46	Woodbourne Jr. High	Counselor's Office	Yes	Yes
# 56	Robert Poole Jr. High	Library	Yes	Yes
# 57	Lombard Jr. High	Guidance Office	Yes	Yes
# 72	General Henry Lee Jr. H.	Counselor's Office	Very little.	Very limited.
# 75	Calverton Jr. High	Library	Yes	Yes
# 76	Francis Scott Key Jr. H.	Guidance Office	Yes	Very limited due to student immaturity.
# 77	Herring Run Jr. High	Guidance Office	Yes	Yes
# 78	Harlem Park Jr. High	Library	Yes	Yes
# 79	Wm. H. Lemmel Jr. High	Library	Yes	Yes
# 80	Rock Glen Jr. High	Library Careers Rm.	Yes	Yes
# 90	Clifton Park Jr. High	Guidance Office	Yes	Yes
# 91	Gwynns Falls Pk. Jr. H.	Library	Not enough staff, no.	Yes, when used.
# 93	Northern Pkwy. Jr. H.	Guidance Office	Yes	Yes
#130	Booker T. Washington Jr.	Guidance Office	Yes	Yes
#180	Cherry Hill Jr. High	Visual Aids Room	Yes	Yes
#181	Houston-Woods Jr. High	Guidance Office	Yes	Yes
#222	Pimlico Jr. High	Library	Yes	Yes
#230	Canton Jr. High	Guidance Office	Yes	Yes
#233	Roland Park Jr. High	Guidance Office	Yes	Yes
#239	Benjamin Franklin Jr. H.	Guidance Office	Yes	Yes, limited due to student immaturity.
#453	Fairmount Hill Jr. High	Guidance Office	Yes	Yes, although limited.

In a survey of 12th grade students at #70, Southern Senior High School, Mr. Jon Frisby, Counselor, asked: Have you used the VIEW system? Yes: 175 No: 375. Mr. Frisby reports that the Guidance program at Southern this year was organized with the 10th grade students being introduced by the Counselors to the VIEW system, and virtually all 700 students used it at that level. There was no organized VIEW program for the 12th grade students, since most of these students had already made career choices before the VIEW system was installed.

GAK:BW

c: Mr. Niel Carey  
 Mrs. Carolyn Boston  
 Mrs. Charlotte Mebane

cards available. At the end of February some 12 occupation cards had been added to that list with another 52 expected by the end of March. None of the additional 52 expected by the end of March were actually in the file as of the end of June, and there is no indication when they'll be ready. Thus the production of new cards has fallen short. The target of 150 to 200 cards stated to the E's by the Coordinator was disavowed by the project management, which emphasized classification and revision, and there is no specific goal in this area.

A continuing problem with the VIEW system has been the reliability of the equipment. The machine is simple to operate, but is less trouble-free than would be desirable for a machine to be used frequently by a variety of people on an in-and-out basis. Very serious equipment problems were experienced in prior years, and considerable of the Coordinator's efforts and "PR" work have been devoted to smoothing out these problems. However, there are still significant difficulties with the machine, particularly with the respect to the printout function.

As the prototypical Center at Southern was also supposed to be a place where visitors might come to examine the equipment and the usage of the Center, the E's requested that the Project Staff establish a log to record the visits of outside persons to the Center over the period of the school year. This request was made in December, but no log was established until late in the school year. From the time of the establishment of the log until the end of the evaluation period, no visitors had come to examine the Center.

Thus, the goal has been met in that the Center has been established, but the development and usage of the system have lagged behind expectations.

#### Goal II - Career Education Leaders

A. Method - 15 teachers will be selected from among the staff of Southern High School who have attended a minimum of two in-service experiences orienting them to career education and to its implications for the teaching of their subject matter areas. Their involvement and participation will be examined.

B. Expected results - Certain secondary teachers will have been introduced to the implications of career education for their own teaching. Some of these will have been identified as leaders due to the extent and nature of their participation in implementation of departmental activities.

## Data Collected

It is the opinion of the E's that the inservice experiences as defined above were never carried out. However, certain substitute experiences took place which fell outside of the evaluation due to their early occurrence.

There were two addresses which were made by Dr. Kenneth Hoyt of the University of Maryland on the subject of the explanation of career education and the teacher's responsibility. These took place at Walbrook High School on 24 October 1972 and at Southern High School on 13 November 1972. They were directed to the entire administration and faculty of each of the schools in question. It is the understanding of the E's that these two experiences were intended to serve the purpose specified by this Goal. It is the opinion of the E's that the procedures operationalized did not meet the Goal as specified. However, a week-long Career Fair was held in January at Southern High which grew out of these experiences, and teachers exhibited substantial motivation at both schools.

## Summary

In summary, it may be seen that the senior high component of the project appears to have made the least progress over the past year. Significant problems remain with respect to expanding the content of the system and the functioning of the equipment. In-service training and dissemination efforts are not likely to be successful until these problems are solved.

## III. CONCLUSIONS AND RECOMMENDATIONS

In the following pages, ARS offers some observations and interpretations based upon the evaluation described above. These are presented according to the three major components of the Maryland Career Development Project which were primarily the subject of the evaluation.

### The Elementary Component

Of the three components studied, the Elementary Component was clearly the most far-reaching and ambitious. It set out to change behaviors of significant numbers of both students and teachers with respect to a broad spectrum of career education variables, only some of which could be measured in this evaluation. The Project was most clearly successful with respect to teachers. There was ample evidence that the Project both provided materials and experiences designed to influence the teachers in the direction of career education and succeeded in its efforts to do so. Teachers responded favorably to the workshops which were held, and expressed the importance of career educa-

tion activities at the elementary level. Furthermore, their daily teaching activities also reflected a strong concern with career education.

Perhaps the most important single impact of the Project was the emphasis placed on career factors by the elementary teachers. Although measurable evidence may be a long time in developing, it is the opinion of the E's that this emphasis cannot but have a strong influence on the later thinking and behavior of the students.

Although handicapped by the lack of baseline data, the E's also concluded that students were making good progress in recognizing the occupational attributes of common occupations (i.e., career awareness). Progress in self awareness was less clear, but evident, at least for some students and some classes.

Some recommendations appear warranted:

1. The device of getting the teachers to participate in the planning and design of career education activities and materials through workshops was effective and should be continued on a periodic basis. Somewhat greater structure might be applied in setting up such workshops, however, including the development of criteria describing the kinds of outputs desired from the workshop activities.

2. It was clear that the Project was more successful with some students and teachers than with others. A study should be conducted to determine why. Such a study would involve a much more intensive effort than was possible in this evaluation.

3. The concepts of career awareness and self awareness have not been well defined by the Project Staff in terms of the criterion student behaviors being sought. Such criterion behaviors would form a useful framework around which to organize in-service training experiences, resource materials, and classroom activities.

4. The Resource Guide (Notebook) needs much work with respect to consistency, emphasis, and organization.

5. The elementary effort should be extended to other elementary schools, probably through the medium of further in-service efforts and an improved notebook.

6. Further efforts to identify and develop materials suitable for use in career education, and to make sufficient supplies of these available, are warranted.

7. Continuing evaluation procedures should be developed, with the help of the teachers, and the results of these evaluations should be systematically supplied to those engaged in the career education enterprise.

8. System-wide coordination should be more systematically planned, continued, and extended.

9. In-service training and workshops should be conducted early in the school year and should draw heavily upon the actual experiences of teachers actively working with career education.

10. It was clear that the career education program must compete for the time and attention of teachers and students with other school programs. Greater progress would be facilitated by placing an increased priority at administrative levels on career education.

#### The Junior High School Component

The core of this component was the attempt to conduct a work experience program for a small number of "high risk" students at two schools. Special in-school work was developed to accompany the work experience activities. Efforts were made to generalize these developments in the form of a model, teaching/learning packages, and career guidance training for counselors.

The work experience portion of this component appeared to be moderately successful. The cooperation of a number of employers was enlisted, and modest numbers of students from the two schools held jobs. There was an apparent, though not always significant, continuation of the favorable impact of the program on attendance which was seen in former years. However no impact on grades was detectable (though only crude grade categories could be used in this assessment). Student interest appeared to be comparatively high, though a number of students dropped out or withdrew from the program. Employer ratings of students' personal characteristics on the job were lower than would be desirable. Yet many employers had continued their participation from last year.

The workshops associated with this component were generally well-received. 43 teaching/learning packages were developed at School 72, and a model was assembled. However, the teaching/learning packages were developed without overall planning and prior specification; the model was an assemblage of a variety of bits and pieces; and neither one was subjected to meaningful tryout, assessment, and revision.

The program appeared to function more effectively at School 80 than at School 72. This may have been because of the personnel involved, the fact that all students at School 80 were 9th graders, the content

of the program, and/or the fact that the students at School 80 were of somewhat better background than those at School 72. No data exist to explain this difference at the present time. The E's did note, however, that the jobs held by the students at School 80 seemed to be somewhat more varied in nature than those held at School 72.

The following recommendations are offered:

1. The work experience program should be continued, and greater effort should be made to locate students in more meaningful jobs.
2. Considerable developmental work is needed to supply a consistent theoretical framework and basis for tying together the various parts represented in the Model. Without this it is merely a collection of suggestions, whereas it could be a guide to the development and application of a variety of career education approaches.
3. The teaching/learning packages should be turned over to a small number of teachers for trial and study. These results should be used to guide future decisions about implementation.
4. Further in-service experiences for counselors appear warranted. However, these should focus on the attempt to define better the role of the counselor in career education, and should stress participatory activities.
5. The limited academic program given these students presents a serious problem of articulation with a workable high school program. In addition, if the study should drop out, the kinds of jobs involved in the work experience program so far provide little in the way of skill training and have little in the way of a future. These problems must be addressed and solved before the work experience program can be considered successful enough for extension to other schools.
6. Continuing evaluation and feedback is needed.

#### The Senior High School Component

Of the three components, it appeared that the Senior High School Component had made the least progress during the past year. The intention was to establish a functioning prototype Career Information Center at Southern High School comprised of the VIEW system containing information regarding educational and local occupational opportunities. This center was to be used by students and teachers and to serve as a sort of demonstration center for those interested in the process. In addition, 15 Southern teachers were to be exposed to two in-service experiences

focused upon their teaching of their own subject matter areas. In brief, the Center was established in a sense, and two general lectures on career education were substituted for the latter goal.

Several difficulties with the Center were noted. The equipment continued to provide problems; the Center was often unmanned except by the librarian; only 12 occupations of more than 50 scheduled were added to the file during the year; and, with the exception of required demonstrations for the 10th graders, only a handful of the more than 2000 students at Southern, and no visitors, used the Center, according to the data available. On the positive side, those students who did use the Center responded quite favorably to it.

With respect to the in-service experiences designed to create "career education leaders", the E's are of the opinion that the lectures substituted for these experiences did not meet the goal as set forth by the Project Staff.

The following recommendations are offered:

1. The VIEW equipment has continued to be a problem. It is recommended that serious consideration be given to reorganizing the career information component around different equipment.

2. Immediate attention should be given to the development of a more complete file of occupations and to the addition of the occupational cards originally promised. The more comprehensive the content of the system, the more likely it is that it will fulfill the needs of the user (and be used in the first place).

3. As reactions were essentially favorable from those who used the system, it is recommended that a systematic procedure be set up to expose all students to the career information system on a regular basis. This might be done through selected classes, through counseling periods, or otherwise, but could at least ensure student familiarity with the system and stimulate subsequent volunteer usage.

4. Continuing in-service experiences for the counselors and the coordinators of each of the schools using the system should be scheduled. These should include suggested procedures for ensuring student familiarity with the system. This should be done immediately, as most of the secondary schools already have the equipment.

5. Continuing systematic evaluation and feedback is needed.

### General Summary

In general, the Maryland Career Development Project has met the large majority of the goals established for its third year of operation. ARS judges the Project to be a successful one, in spite of the fact that much work remains to be done. Although it is possible that the Project might benefit from a consolidation of Project authority within the Baltimore Schools, there has apparently been a commendable cooperation among city and state personnel which has facilitated the accomplishments of the Project. The E's have noted a general degree of enthusiasm for the Project on the part of most of those concerned. In-service training efforts have been generally successful, though there was some evidence to suggest that less emphasis on speeches and more emphasis on workshop activities might be desirable, along with somewhat better organization. There has been a certain diffuseness in planning which may be a function of the organization of the Project, and should be tightened up. More work is needed on the development of functional and behavioral goals for the various Project activities. Better lines of communication involving the actual activities in the classrooms and the field, better recording keeping, better coordination of activities, better evaluation and feedback planning, etc., are all organizational areas which might be improved.

However, it is again reiterated that the Project has made commendable strides in actualizing career education in the Baltimore schools. In the opinion of the E's, the major overall accomplishment of the Project has been to create a widespread awareness and emphasis on career education within the schools which will surely impact all those exposed to it. The continuation of Project activities, with the incorporation of the above recommendations, is strongly indicated.

APPENDIX A

Component Program Descriptions

Elementary Component  
Program Description

The following program description is based on information obtained from written reports, descriptions and summaries supplied by Mrs. Audrey Allen, Career Exploration Coordinator, Project Schools, Mrs. Nancy Pinson, and Mr. Oberlin Perry. Further data was gathered through interviews with Mrs. Allen, Mrs. Pinson, Mrs. Charlotte Mebane and Mr. Neil Carey. Also of use were agenda and written products from the Workshop for Elementary Resource Component.

The elementary component of the career development program is concerned with "increasing the career awareness and self awareness" of those children it involves. Career awareness has been defined by the project staff as ... "Career Awareness includes knowledge of the family as a social institution, knowledge of some basic educational prerequisites for a variety of career options, some knowledge about the range and nature of various job families, knowledge of values essential for the maintenance of a democratic society and the regulation of human behavior and knowledge of worthwhile opportunities and activities for self fulfillment."

Self awareness has been defined by the project staff as:

"Based on knowledge about self including abilities, skills, talents, interests and needs, the student will be able to describe and demonstrate his various abilities and interests." In order to carry out this stated goal, eight elementary schools were selected for the program. These schools are:

- #22 George Washington Elementary School, 800 Scott Street
- #35 Harlem Park Elementary School, 1401 West Lafayette Avenue
- #60 Gwynns Falls Elementary School, 2700 Gwynns Falls Parkway
- #64 Liberty Elementary School, 3901 Main Avenue
- #103 Henry Highland Garnet, 1315 Division Street
- #132 Coppin Elementary School, 1114 N. Mount Street
- #141 Abe Lincoln Elementary School, 300 N. Payson Street
- #144 James Mosher Elementary School, 100 Wheeler Avenue

Teachers and administrators from these schools who volunteered to participate were invited to attend a series of two 2 1/2 day workshops. The first workshop was held October 5, 6 and 7, 1972, the second is planned for January 1973. The first workshop consisted of speeches and films on Career Ed. panel discussions, work sessions to develop activity sheets (plans for later programs developed for the unique needs of each school) and examination and discussion about available resource materials.

An attendance goal of one teacher from grades K-3 and one teacher from grades 4-6 and one administrator from each school for each workshop was set. Thus the total attendance goal for the first workshop was twenty four (16 teachers and 8 administrators). The actual attendance was 20 teachers and 2 administrators. Most of the administrators that were invited were assistant principals, a few were senior teachers. The two administrators that attended were senior teachers. Due to administrative obligations at the beginning of the school year, the Assistant Principals were not able to attend. In the light of this unexpected problem, an attempt to interest other senior teachers in the program is under way. However, at least two teachers from each school did attend and three schools were represented by more than two teachers. The distribution of primary and intermediate teachers met the goal as stated.

These workshops are intended to train the "leadership cadres" (teacher/administrator groups) from each school to become "in school experts in the implementation of career awareness programs". They are to develop leadership goals that have been defined as the ability to plan, operate, and evaluate a career awareness plan as appropriate for the particular school. During the first workshop, the teachers, working in groups made up of teachers from each school and other groups made up of each grade level developed:

- 1) Plans for the program to be implemented in each school (called methods of implementation).
- 2) Suggested guidelines for developing and maintaining community resources.
- 3) Career Education activity sheets for each grade level by related subject unit.
- 4) Evaluative criteria for each activity.

Thus the leadership goals and methods for operation and evaluation of this program are underway. Measures designed to collect evidence of "qualification" through self report (a survey) and interjudge agreement are presently being developed by the project staff. An attitudinal pre-test was given by Mrs. Allen before the first workshop. The results are not yet available and the post-test replication has not yet been administered, however plans have been made to complete these tasks.

After the workshop, the "leadership cadres" are to meet with other teachers in their school. They are to pass on their skills and knowledge to other teachers in the school as well as to the children they teach or in the case of the administrators, to the children with which they come in contact in the course of their activities.

Ultimately then, the ideal result would be that all 1,400 students in these schools will benefit from the knowledge gained at the workshops through the 24 volunteers expected to attend.

The teachers are then to plan activities outlined on the activity sheets that they developed. These activities are of three basic types. The first basic type include in class activities directly involving only the students and the teachers.

The major portions of time has been planned to be filled by class discussions. A number of units are available from Mrs. Allen. They are concerned with such topics as water power, city life and the police department. These resource materials contain information to be passed on to the students, suggestions for sources of further information topics for discussion and specific questions to stimulate the students thinking. Other in-class activities include: drawing pictures of family members or people in various occupations bringing reference materials into the classroom for students to use, having students write letters for more information, using magazines and newspapers as sources for current occupational needs and problems of the society, have the students write stories about people in specific occupations or play their roles, devise games involving work related concepts, relate arts and crafts to real life occupations involving such skills and designing and assembling a bulletin board which, for example, reviews each occupation learned about as they are studied. Secondly, the teacher is to develop a list of resource people available to come into the class and discuss their occupations and relate topics. Possible sources for these visitors include parents, relatives and family friends of students,

members of community groups such as senior citizens, and citizens who work in the area. The children are encouraged to think out questions in advance and to interview and discuss their ideas with the visitors.

Finally, the children are to be taken on field trips to various places of business, agencies, museums - places where they may learn about the world outside of school.

The teachers are encouraged to share their ideas and experiences with other teachers directly or through the coordinator.

## PROGRAM DESCRIPTION, JUNIOR HIGH COMPONENT

The following program description is based on information obtained from written reports, descriptions and summaries supplied by Mr. Yancy Whittaker, Junior High Coordinator, John F. Berrente, teacher-coordinator, Mr. John Woolford, teacher-coordinator, and Mr. Niel Carey, Director, Maryland Career Development Project. Also data has been gathered through interviews with Mr. Carey, Mr. Whittaker, Mr. Berrente, Mr. Woolford, Mr. Leon Lerner (counselor, General Henry Lee Junior High School).

The Junior High School component of the Maryland career Development Program has been implemented in two Baltimore City Junior High Schools; Rock Glen Junior High and General Henry Lee Junior High. The schools are quite different in that Rock Glen is basically a suburban school in a fairly new building with mostly middle-class students while General Henry Lee is an inner-city school in a very old structure with students largely from a low socio-economic background. Due to these and other differences the Junior High component has been tailored to the unique needs of each school's students and two different programs have emerged. The common expected result of those programs is that the students will exhibit improved attendance and school achievement. This is to occur as the result of the institution of work-oriented programs at these two schools. Beyond this, however, additional objectives have been developed at each school. In order to demonstrate the emphasis of each program, a review of these objectives will be followed by a description of the program at each school.

## The Work-Oriented Component at Rock Glen Junior High School

### OBJECTIVES

1. To help students develop basic job related skills, attitudes, and understandings which will enable them to live economically productive lives.
2. To provide daily classroom contact with students for the purpose of:
  - a. Providing immediate and timely counselling and guidance relating to work experience on an individual and group basis.
  - b. Creating a close and confidential relationship between coordinator and student.
  - c. Collecting and maintaining records pertaining to personal data, employment data and school status of students.
3. To use the classroom situation as a "laboratory" in which actual work experiences can be shared, examined, and analyzed.
4. To help students prepare for, and adjust to, what in many instances may be their very first job experience.
5. To provide remedial work, through job related exercises, in basic skills of handwriting, arithmetic, spelling, and oral communications.
6. To develop a knowledge, understanding, and an appreciation of the principles and concepts inherent to American business.
7. To develop a knowledge and understanding of the techniques used in job seeking, employment testing, and the job interview.
8. To develop a knowledge and understanding of city, state and federal taxes leveled on wages and income as well as on the employer's payroll, and the benefits derived therefrom.
9. To develop an awareness of accident hazards inherent in various types of employment and to encourage the practice of safety habits.
10. To help students understand union-management relationships.
11. To acquaint students with laws relating to employment of youth, including regulations as to age, hours of employment, and type of employment.

12. To provide an opportunity for investigation of career opportunities and areas of vocational interest in the light of newly acquired work experience.
13. To use the student's work experience as a basis for understanding and practicing budgeting, saving, and credit.
14. To develop a knowledge, understanding, and appreciation of management's point of view in their attempt to carry out responsibilities and achieve objectives.

There are, at the present time, 42 ninth grade students in the work-oriented program at Rock Glen. These students were selected as a result of their poor attendance and grades - when it has been shown that these students are under-achieving and additionally, as a result of scores on an attitude measure. Generally, performance of the student in the eighth grade is used as the determinate of whether the student will be included in the program. The number that can be involved is determined by the space available in the program due to the work load of the personnel. As this time, there is a waiting list of students qualified to participate for whom there are no facilities available.

The counselor after speaking with the student and his parents seeks to arrange employment locally for the student. The students work in pairs at each job so that student A works for one week at a job while student B attends school and the next week student B works at that same job while student A goes to school. The prospective employees are approached and employers and student pairs are matched by the counselor. The employer has no say in the selection of which student will work for him. There has been no cost to the employer in the past so there has been no problem in getting cooperation from them. A transition is now being made to partial payment of students wages by the employer. All additional costs are borne by the project. The student is paid \$1.00 to \$1.20 an hour for assisting his employer in various tasks assigned. The program begins with an orientation period called "The World of Work" during which the students receive instruction on work habits and skills.

While in school the student receives special classes in the regular subjects offered but in a more condensed form. This way he is able to keep pace with the

other students and will not be behind when he returns to a normal schedule in Senior High School.

In some cases, the initial job assignments are not completely satisfactory. Adjustments are then made in an effort to match employers and students in a satisfactory arrangement for all concerned.

## The Work-Oriented Component at General Henry Lee Junior High School

### OBJECTIVES

1. To provide meaningful learning experiences, both academic and work-related.
2. To develop desirable habits in "high-risk" students which will allow them to feel comfortable in school attendance; to develop desirable personal habits which will allow such students to adjust in out-of-school situations involving inter-personal relations.
3. To develop desirable attitudes so as to be able to adjust to varying experiences both in and out of school: to be able to meet typical demands made upon them without developing negative reactions.
4. To assume positive responses within school and work settings so as to desire continuance at school and work, thereby reducing threats of absenteeism from school or work.
5. To demonstrate that work is a valuable resource at the 7th grade level for the purposes stated, as an adjunct to the curriculum, and should be included as part of planned curriculum.
6. To involve non-school personnel in direct contact with 14 and 15-year old students as instructors and supervisors; to develop a cadre of such non-school personnel as a group of resource personnel in the community to act in liaison with the school.
7. To develop in "high-risk" students a program in which they can share successful experiences, thereby developing positive self-concepts.

The students who are selected for the program are those who have been labeled "high risk". "High-risk" means the student is: 14-15 years old, absent in three quarters of school no more or no less than about 139 days (thus indicating some desire for school), academic failure due to absence rather than low academic aptitude, general reading ability between 4.0 and 6.5 on Iowa Reading test, and general apathy in the student. These children generally come from the inner city, are both black and white, from large families with a low level of income, many with fathers not at home. Many of the students are already work-oriented since they have been helping at home or in neighborhood jobs. Only a few of these students have delinquent records.

At this Junior High School the work-oriented program extends from the 7th grade through the 9th grade. A student may begin the program in the 7th, 8th, or 9th grade but most participate for the entire three years. At this time, there are 30 students in the work-oriented components at General Henry Lee.

After initial selection, the students are interviewed by Mr. Leon Lerner, a counselor. Then parental permission is obtained through a letter which is sent home explaining the program. It tells them that their child has been chosen for the work study program which means that the child will report to school in the morning, attend three classes which involve the teaching of skills needed for employment (Math, English, Work Skills, etc.), at 11:30 they will eat lunch at school and then report to work (for no more than 20 hours a week). The students will be paid by the project approximately \$1.00 an hour (this cost is at this time being partially assumed by the employers), and the students must maintain satisfactory attendance in order to remain in the program.

If the parents signify approval by returning the bottom of the letter with their signature the necessary paper work is begun. (Students who are between 14-18 must apply for a Maryland work permit and all students must have a social security number.) The coordinator then seeks employment for the child by contacting local small businessmen. They are informed about the program, told that they are to teach various skills related to obtaining and retaining work. It is also pointed out that any problems which might arise will be worked out in a confrontation between supervisor, student and teacher-coordinator.

With the agreement of the employer, an interview is arranged after which a time card is issued to the student to be kept and completed by him. After placement, an employment certificate for employees 14 to 18 years old is executed. A bi-weekly invoice is kept which is used to verify the time worked and checks are issued from this invoice.

The staff continues to work with the students to insure that the placement is satisfactory. If there are problems an attempt is made to continue searching until the right combination of student and employer is found.

Although no specific data will be presented until the completion of the third quarter, reports from both schools have been very positive. Both of the staffs have expressed pleasure over the results of the program - they report encouraging changes in attendance and grades in most cases and also report satisfaction on the part of employers.

## PROGRAM DESCRIPTION, SENIOR HIGH COMPONENT

The following program description is based on information obtained from written reports, descriptions, and pamphlets supplied by Mr. George Kammerer, Jr., VIEW coordinator. Further data was gathered through interviews with Mr. Kammerer and observation of the Occupational Information Center at Southern High School. Also, use has been made of data collected from students at Southern High School.

The Senior High component of the Career Awareness Program consists of the establishment of a Prototype Career Information Center. The major component of this is the development and use of the VIEW (Vital Information for Education & Work) System. This system is designed to eliminate some of the problems guidance counselors encounter when gathering and disseminating career information to students. It is expected that the center will be used by students, teachers and counselors. It is hoped that as a result, VIEW will save time for the counselor and cut down on duplication of effort while making current, inexpensive and localized career and educational information and readily accessible to all students.

Information in the form of individual occupational summaries for the system is collected by the VIEW Coordinator and put in the form of a "VIEW Scripts." The VIEW script contains such information as:

1. Minimum schooling required
2. Recommended high school subjects
3. Course of study after high school
4. Prospects and opportunities within the local area
5. Opportunities for advancement
6. Additional information about the job including salary schedule, work hours and sources of other descriptions

7. Public School Training Program information
8. Local contact persons who will explain further about the job
9. Items to read about the job.
10. Information on related jobs listed in VIEW

Also, an effort is being made to include cards with information about local educational institutions and opportunities both technical and academic. (The coordinator plans to update and revise the scripts as necessary.) The coordinator takes the script, which runs from 1 to 4, 8 1/2 x 11 pages and is illustrated with eye catching pictures and makes it ready for reproduction. He uses a microfilm Process - Camera to photograph all four pages on one frame of film. A Card-to-Card Copier is used to reproduce as many cards as are needed.

Each participating school receives a complete deck of all the cards which have currently been produced. At the beginning of this school year approximately 72 cards were available; presently there are 84 different occupation and education cards in use with another 52 (28 of which will be health related) expected by the end of March. This will bring the total to 136 with an end of the school year goal of between 150-200 cards.

In order to make use of these aperture cards, Microfilm Reader-Printers have been made available to the participating high schools. The model school for this program is Southern High and is the only center considered in this evaluation. The Reader-Printer can be used by a student with only a small amount of instruction from a teacher or counselor. The occupation and/or education cards of interest are selected from the indexed file of cards accompanying the machine. The user then places the card in the machine and is able to scan and read the information as it appears on the viewing screen. If he wishes to have a copy of any or all of these pages for his further use, he can push a button and receive the copy in a matter of moments.

APPENDIX B

Transcript of Elementary School Observations  
(8 schools)

SUMMARY OF OBSERVATIONAL VISITS, ELEMENTARY COMPONENT, MARYLAND CAREER EDUCATIONAL PROJECT, 14 AND 15 FEBRUARY 1973.

The first school which was visited was #35, Harlem Park Elementary.

Harlem Park is an ESEA school where most of the children receive free lunch. There are approximately 900 children in grades K through 6, and there are 25 teachers. It is a relatively new school where the Principal is Lester Hudgins, and the senior teacher is Mrs. Loggins. The first class observed was a 6th grade class taught by Mrs. Hendricks.

Mrs. Hendricks' class was divided into three groups on the basis of reading ability: A grade 3, a grade 3-4, and a grade 4 level. Mrs. Hendricks worked first with the 3-4 level where the assignment was based on the previous day's reading selection which was about Leonard Bernstein. The teacher reviewed the story by asking questions to bring out various jobs within the field of music in which Bernstein had engaged: pianist, teacher, author, and conductor. This was combined with word meaning and dictionary drill, oral reading, and lots of questioning. The assignment for this group was to write a paragraph about Bernstein including information about his family, childhood, interests, schooling, opportunities; accomplishments which they admired, and his habits which led to success.

The grade 4 level group had read a story on pottery hats. Mrs. Hendricks did not spend as much time with them and did not discuss pottery (but may tomorrow). A Korean story was assigned for tomorrow (which appeared to be less career-awareness-oriented than some of the other material).

Mrs. Hendricks spent most of the time with the level 3 group which had read a story about Fireman Pat. She brought out where fireman work and why they are different (brave), and used questions directed toward the equipment and features of the fireboat. Further questions concerned what firemen do when they

are not fighting fires and why. The discussion then turned to a previous story about another worker who was a fruit peddler; why his business was good and bad; and what characteristics of his job led him to decide to change to operating a fruit stand. She asked what made him a good salesman and covered a number of key words in word drills (such as difficult, vacant, stand, shiny, harbor, market). She then asked about characteristics necessary to be a salesman (nice, polite, clean, not gruff, good manners, honest, etc.). The reader being used was not a special reader selected by Mrs. Allen; the main difference with respect to Mrs. Hendricks activities is the fact that she now emphasizes more of the career related ideas associated with the stories in these readers-bringing out the business activities of the people in the stories and so forth. Mrs. Allen agrees that the clear difference in the program is more the difference in emphasis rather than just differences in materials.

Mrs. Hendricks then discussed persons in the story in terms of a chart comprised of columns headed by "person" "job" "products" and "facts about jobs." Examples were Joey's mother who was a baker producing doughnuts and coffeecakes and had to be dependable and clean; Joey's father was unemployed and produced no products as a result of automation and the fact that it is hard to get a job without a skill or trade.

The lesson concluded with questions about what the children would like to be and why. The answers were mostly on sales, and Mrs. Hendricks asked them to think about who in their neighborhood was in sales (including the paperboy or girl).

I did not note particularly the posters in this room although I presume there were some there because most of the rooms appeared to have posters and pictures around the room which bore on aspects of career education. There was one list posted in this room of six questions: these are as follows: 1. What is career education? 2. What are careers? 3. Why do people work? 4. What

preparation must be made for work? 5. What work is available in our society?

6. How do careers affect our lives?

The second room visited was a fourth grade class taught by Mrs. Margaret Dunlap. In working with the whole class, Mrs. Dunlap read poems about a librarian, milkman, nurse, etc. from a paperback book called "Careers A to Z". Afterwards she pointed out that the "Character Guide" shows how people grow from babies to your size to adults and she asked the kids, "what do you do at each stage?" Mrs. Dunlap then worked with the children asking them what they did as a little boy or girl, something they do now, and something they will do when older. They were supposed to have drawn some of these things in pictures. Most of the "something that they would be when they were older" were occupation-related, including operating a lunch counter, being a doctor, a baseball player, store owner, football player, nurse, singer, basketball player, fireman, teacher, etc. Mrs. Dunlap did not comment about any of these things. The rest of this period was then spent listening to the children read back what they had written about their pictures along these three topics.

There were quite a few room decorations of a career awareness nature here, including board posters with pictures of people in 11 jobs and the job names involved; also a series of Black Americans of repute posted across the top of the board with printed descriptions of their work.

After the period Mrs. Dunlap briefly mentioned that she and her class had interviewed the school secretary and the school custodian, and that she had had the class help to make choir robes from bed sheets, giving them some ideas about assembly lines and sewing machine usage. She also used this exercise, plus doubling recipes for fudge-making as practical mathematics exercises.

The second school visited was school #141 Abraham Lincoln Elementary School, where the principal is Mrs. Rosalind Lee. There are 729 students in 22 classes, in grades K through 6. About 50% of the students parents are on welfare, and

some 612 are in the school lunch program.

The first teacher visited was a Mrs. Conway, grade 2. Again the class was segregated into two groups. Group 2 was engaged in a group reading of a poem about differences and similarities in children and people (such as: Do all people have children? Do all people look alike? Do people like the same things? Do all people wonder about these things?) The other group worked with the teacher who, using pictures of family activities on an easel, stimulated questions about family life. The children had written and drawn pictures about something to do at home in their free time, and the children then read their own stories and explained their pictures. The object of the lesson was to get across the similarity in what people do with their free time.

Wall decorations in this room included: Black Americans and their job descriptions; questions about self; a poster showing that some families are different; families of the children in the room in story form; etc.

The second teacher in this school was Mrs. Gloria Dorsey, 3rd grade. Mrs. Dorsey held a group session in which the children were asked what they wanted to do when they grew up and why, stimulating answers of all kinds: teacher, policeman, singer, fireman, teacher, painter, nurse, and so forth (some reasons included practical ones like making money). One of the exercises which was undertaken in this class was going through a job application. Mrs. Dorsey had placed a job application on the front board and through the words and the meanings of the terms in the job application. The application blank was read as a group reading chore and then blanks were passed out for the children to work on. The children were then asked to fill out job applications with respect to the jobs that they would like to do when they grew up. (In this case the teacher had a tendency to use words that were too tough for the kids and she failed to repeat things that the kids said so that everyone would hear.) She tried to take them verbally through the procedures of finding a job. How would you go about finding

a job? What would be the sources that you would look in and what would you do, how would you apply, how would you get there, and so forth.

Posted on this room on the bulletin board were about twenty names from doctor to dog catcher; the job application blank referred to above; picture stories by children; the Black American series in the world of work; a poster with questions for interviewing, including: Where do you work? What do you do? Do you make a lot of money? Do you like to work? What do you dislike? What do you like? Why did you choose that career? There were also photos of various jobs on the walls, and lists of the job categories of those workmen who built houses.

While half the children worked on filling out the application blank the other half of the class wrote sentences about why they wanted to do a given job and they drew a picture illustrating it.

On the way to the final class it was noted that in the hall there were posters of city workers and printed pictures of children's stories illustrating various jobs.

The final class visited was Mrs. Fowlkes, Grade 6. This class had prepared to interview a man from outside about his job, and Mrs. Fowlkes had previously assigned the review of a set of rules for interviewing. The children conducted the interview (which was tape recorded for a later study) with a Mr. Simmons who was quite a diversified man and perhaps not a good subject for this kind of exercise. Various questions in the interview included information such as: Job location? How much education is required? What other jobs have you had? What equipment do you use? Do you like your job? Would you like to have other jobs? What do you think of education? etc.

Posted around the room was again the Black American series and a career awareness bulletin board with student pictures and stories about "what I would like to be and why."

Summary of Observational Visits  
3/6 #22 George Washington Elementary School

The Principal of this ESEA Title I school is Mrs. Alma McAvory. There are approximately 690 students in George Washington School (#22). The first class visited was a third grade taught by Ms. Cheryl Lanterna. She began the lesson with a question and answer session about looking for a job. The discussion centered around good grooming - why it's necessary. The class then talked about the job application, what things an employer would need to know about you - and why. Then four children played roles to demonstrate then right and wrong ways to apply for a job. One child played the role of the employer who interviewed three different applicants for a sales job. The first slouched in her chair, acted indifferent and didn't know the answers to all the questions asked of her. The second applicant wore an oversized sloppy sweater, had had a number of jobs and appeared lazy. The third student was dressed neatly and was polite, experienced and appeared ambitious. After the role playing, the class was asked who they would hire for the job and why. It was clear that the students understood the lesson that had been demonstrated.

The next class visited was Mrs. Winkler's fourth grade. The class was preparing for an afternoon visit to the local art museum. There was first a question and answer session about museums and art - what kinds of things are found in a museum, for example. The teacher had on display several prints of famous paintings - she led the students in a discussion about styles of painting. The group then mentioned names of careers already discussed - after which they were given questions to answer about jobs they hadn't talked about before. They worked in groups of about 4 or 5 using the dictionary to find out answers to such questions as - "Is a diplomat someone who makes diplomas or someone who tries to solve international problems?" (The group was at first certain he makes diplomas but after research changed their minds). Some other words discussed were curator, philanthropist, veterinarian and archaeologist. Some students had prepared special reports on

various artists, which they then presented orally to the class as we departed.

We then observed a sixth grade class taught by Ms. Jackie Burgess. There was a display in the room with information and letters about various careers received by the students in response to letters they had written to companies, schools and the military.

Also, there was a classroom job bulletin board. The class operates an employment service for jobs to be done in the room-students fill out applications, are interviewed and then, if hired, are rated weekly on their performance. The teacher divided the class into reading groups. Two of the groups worked on non-career oriented reading materials (as far as I could tell). Some worked in work-books while others answered questions about their reading materials. The third group discussed with the teacher a story they had read about an 11 year old boy who was dreaming so hard about his future career that he fell out of his chair in school. The group then discussed various aspects of the career that he had chosen (being a pilot or captain of a spaceship). They talked about that job field, the job name, the duties, the necessary skills, the kind of job, what kind of person could hold that job and the main equipment necessary for the job.

The last class visited in #22 was Mrs. Beverly's first grade. The class had apparently been discussing hospital personnel in an earlier lesson and they briefly reviewed the names of hospital employees that they could remember. (they could only remember a few with prodding from the teacher). The new lesson was to take up a discussion of school personnel beginning with the school secretary, Mrs. Bell, who was to be interviewed by the class. Beforehand, the group briefly listed some questions that they wanted to ask Mrs. Bell but the children did not appear very interested or to clearly understand the assignment. Mrs. Bell was brought into the room and was asked the questions that had previously been suggested and then left. Mrs. Beverly said that the class had been progressing from job family to job family and would interview one more person in the school and then move on to discussing people involved in police work.

Summary of Observational Visits  
2/27 #60 Gwyns Falls Elementary School

The principal at this school is Mrs. Wilson and the students come from an economic background of middle to low middle to low. The school has about 900 students. The first class visited was Mrs. Brooks' 1st grade. Displayed around the room was a bulletin board dealing with self-awareness, pictures drawn by the children demonstrating various emotions and a display entitled - my job - what I need. The teacher conducted a question and answer session about what the children want to be when they are older. Such answers as: fireman, nurse, singer, teacher, maid, and bus driver were received. Each child had written a story about the job that he picked - a number of these were read to the class by their authors. The teacher then lead a discussion about why people work. They discussed three categories of reasons - to pay bills, to gain pleasure (vacations, etc.), and to help others. The class was then divided in groups according to the jobs they had chosen. They were stationed at learning centers which were equipped with reference materials about their chosen careers. The children worked further on books they they were assembling about those careers listing such things as tools and skills necessary for that job. This was a demonstration of the interdisiplinary approach which makes use of many different types of skills - in this case - writing, reading, and research skills were combined.

The next class visited was a 6th grade taught by Mrs. Craig. It was pointed out that Mrs. Craig had taught this same group of students through the 4th and 5th grades as well. There were a number of career information posters around the room about various occupations. The lesson observed was a reading class for which the class was divided into three groups. Group I worked on an individualized reading program which consists of reading books selected from a package of 100 available to the students. Group II was beginning a new reading book - not

career oriented, and at the time of observation they were reading a poem about the new book into a tape recorder and playing it back. Group III's lesson took up the major part of the period while the other groups continued to work on their own. This group had been reading short biographies about famous people. They each chose their favorite person and wrote a paragraph about them. After reading these aloud to the group, the students matched careers to all the names of the people read about to test their retention of the reading assignment. The group was then assigned two tasks - one was to do research about the person, chosen and then list five facts about them and their jobs in a booklet given to them by the teacher. (Later, all of the group's contributions were to be filled in in all of the booklets.) Secondly, the students were to look in the classified section of the newspaper (these were provided to each child) for ads about jobs he thinks the person that he chose might apply to and add these to the booklet. If there were no jobs advertised that applied to that famous person chosen, then the student was to write a "position wanted" ad for that person and add it to the booklet. Work was begun on this task.

Summary of Observational Visits  
3/14 #64 Liberty Elementary School

The evaluator was met at school #64 (Liberty Elementary School) by Mrs. Gertrude Faber, the school's senior teacher. Mrs. Faber described the school as one with well over 1200 students, K-6, which due to the fact that it has always exceeded the guidelines for academic and economic level, has never had Title I status. However, approximately 650 students are on the free school lunch program. The school, whose principal is Mr. Robert Curland has 35 regular classroom teachers plus a music teacher, a gym teacher, an art teacher, a reading teacher, a librarian, and a senior teacher. This school is a "Right to Read" pilot school (1 to 6).

The first class visited was Mrs. Mattison's second grade. The lesson began with a question and answer period about what the students would like to be and why and what they would not like to be and why not. A child was then selected to read a list entitled "Careers We Know" (about 40). The class then played several games - "Choose a Career" - pick a name of a career out of a box - role play - class guesses which career is being imitated.

Class identified  
all easily

1. telephone operator
2. bus driver
3. policeman
4. nurse
5. baseball player
6. mailman

"What's my line" - Students read descriptions of duties - class guess occupation (this exercise made use of reading skills)

Class also easily  
identified these

1. architect
2. clerk (store)
3. minister

The class then discussed the job application - what must you know in order to complete it? Class answers:

how to read

how to spell

what job you are applying for

how to follow directions etc.

What might they ask for on an application?

Answer: age, name, etc.

The teacher then passed out sample applications for the class to fill out and helped them do it.

There were a number of career oriented displays around the room -

- "someday I will be:" (pictures drawn by students and labeled as to career
- booklets about careers on a display table
- "as I see myself" - selfportraits (self awareness)
- many pictures of various working people posted around the room
- the class prepared career awareness folders containing all the activities pertaining to career awareness that they have been working on for example: word lists, worksheets, - papers entitled what I want to be and why.

Mrs. Beard's second grade was the next class visited. The career awareness displays in this room consisted of pictures of various people labeled with their careers and a bulletin board of career riddles (who am I?)

The class briefly discussed research (about jobs) - Where would you look? They listed encyclopedias, dictionaries, maps, books, newspapers, and magazines. Three girls gave reports on the careers that they would like to have. The girls had done research work at the library (with the rest of the class) and had brought in visual aids and drawn pictures to illustrate their talks. The first girl wanted to be a veterinarian. She read her report about the schooling required, various duties, needs of the community for a veterinarian, settings that one might work

in, and her desire to work with animals. She used a toy doctor's bag to show tools used and explained their purpose. She showed pictures of a veterinarian in the city, country, zoo, and circus. The second girl wanted to be the first lady astronaut. Her report also included duties, education, special training, and details about this job. Her pictures showed such things as the position of the astronaut during take off, the space suit and a blast off. Her visual aids were a jar of "Tang" and "Spacefood Sticks". The third student wanted to be a writer. Her report told of how a writer makes his own hours and schedule, can live where he likes, needs relatively few tools and many do many different kinds of writing stories, poems, etc.) She showed pictures of famous black writers, read a poem by one of them and read a short story she had written about the rewards of being a good girl.

A tape was then played of an interview done by a girl in the class of her mother who is a Psychiatric nurse. She asked about her duties, education, what else she'd like to be and why - what she would not like to be and why not.

In Mrs. Byer's room her fifth graders had displayed pictures that they had done of future careers entitled "My Choice." There was also a bulletin board with career information under it and a poster with a list of occupations involved with drugs. There were many drug oriented displays and posters in the room. The class was combining a unit on drug education with Career Education.

Two customs inspectors came to the room and showed a 30 minute film about drug detection in customs inspection. The class then, after the movie, asked the men about their jobs, education, duties, hours, etc. Then they listed various jobs in the "customs job family". Mrs. Byers submitted a sheet of activities done by the class relating to career awareness (attached).

The last class to be visited at school #64 was a fifth grade taught by Mrs. Westmoreland. This class was also involved in a unit about drug education which they were relating to career education.

Mrs. Westmoreland began by asking the class to review the four purposes of drugs -

1. to prevent disease
2. to relieve pain
3. fight disease
4. control disease

She then led the class in a discussion about certain vocabulary words pertaining to drugs and showed names of things asking the class whether they were drugs or not. (all of these activities were a review.)

The new lesson concerned "workers who are working to educate people against drug abuse." The class was divided into three groups.

Group I - read newspaper articles about drug education and listed those professions involved.

Group II - listened to a tape about drug education made by the teacher. They were then to answer these questions: "Who are some of the workers or what are some of the agencies which are working to solve the drug problem through education?" "What specifically is being done?"

Group III - worked with the teacher at first. They were to list the media used for drug abuse information - television, newspapers, discussions, radio, doctors, insurance companies. They then discussed what they do and why. Mrs. Westmoreland had several ads from various media which the group discussed together.

There was one career information bulletin board display in the room however, most of the space in the room was covered with drug abuse education information.

Summary of Observational Visits  
3/23 #103 Henry Highland Garnet Elementary School

The observational visit to #103 was conducted differently than the visits to the other schools. Instead of the usual 30 to 45 minute presentations in each classroom, we observed a joint project being undertaken by the two classes involved in the career education program at that school. In addition, the E observed activities conducted by other groups in the school were not officially a part of the program.

Mrs. Stern's 1st grade and Mrs. Bryzman's 6th grade are involved in a unit about the bakery. They have viewed a movie and a film strip about people who work in a bakery and their jobs. In order to raise money to buy seeds for a "spring planting" and to learn more about jobs in a bakery the children decided to have a bake sale. They worked in groups of about ten (mixed 1st and 6th grades) in the school cafeteria making cakes and cookies from mixes and materials donated by parents. They also designed posters listing prices and advertising their sale. A small group of children prepared an oral advertising "pitch" and went throughout the school talking about the sale. The actual sale was conducted each day during the week right after school hours. Many parents came and the children easily sold their wares. While other children baked some of the older children came to the first grade classroom and acted as "secretaries" - i.e. the first graders told stories about the movie on the bakery and their own baking experiences and the sixth graders helped to write them down. This project incorporated career awareness with lessons on math, reading, writing, art, health and nutrition.

A special reading teacher took her students (a mixed class of 1st and 6th graders) to community businesses. The children interviewed various workers and took their pictures. After returning to the school, they made posters using the pictures taken and made booklets of stories written about the workers and their jobs. (Based on their interviews.)

A number of displays were noted in Mrs. Stern and Mrs. Bryzman's classrooms as well as in some others. A first grade had a display of folders entitled "as I see myself" which included pictures, map of their neighborhoods, facts about themselves and paragraphs about "what I want to be and why".

Other displays were "who am I?" and "my family;" "my fingerprints are me"; animal careers"; and "how are people alike and different?"

This is a Title I school (Mrs. Mohammed is the principal) which has been condemned and will not be used next year.

School #132 - Coppin Elementary School 5/16/73

Mrs. Lucille Williams is the principal of this school. The first class visited was Ollie Smith's second grade. The lesson observed was about the supermarket - the jobs of all those that work there. There was a very large number of displays on the topic around the room. Titles of some of these were:

Where food comes from

Trucks to the supermarket

Shopping at the Supermarket

A picture dictionary including such words as:

Supermarket carts

Dairy foods

Produce department

Meat department

Butcher

Bagger

Check out counter

Conveyor belt

Elevator

Unloading platform

Stamper

Cash register

Scale

The Produce department

The Supermarket Manager

What's in a Supermarket

The Meat Department

Our talking list (Supermarket, grocery store, etc.)

There was also a board of pictures of people working

The teacher started the lesson by asking the class questions

Define work?- they decided work is using energy to do something or work is using energy to make something

What kind of work have you seen? (class listed workers)

Why do people work? (class listed such things as to get things, money food etc.)

The class then read a poem about what they would like to be - someday and they acted out parts.

When asked what they want to be they answered:

Nurse

Fireman

Teacher

Policeman

Mechanic

Then Miss Smith talked about goods and services using a chart - had them point to goods and services, and pick up examples of goods from the table

They then chose pictures of workers for producers of goods and service producers

Dentist

Butcher

Grocery store clerk

Florist

Baker

Drugist

The class next sang a song about workers and identified the workers in it. Finally the class used role play to talk about the different supermarket workers. They were dressed in costumes and had many props available. Children playing the role of a mother and her children went to the store and went from worker to worker asking them about their jobs (they were store manager, producer, butcher, stock clerk, check out clerk)

I then observed a brief presentation in Mrs. Melvina Byrds Special Education class. A student went from student to student asking him what his job was, why he liked it, what tools he used (had some on his desk) The jobs were:

Policeman

Musician

Janitor

Supermarket clerk

Cook

Barber

Milkman

Carpenter

Nurse

Dentist

Lab technician

(Due to the level of these students their answers were all about the same (I like my job because its a good job) But they did exhibit a certain amount of basic understanding of what those people do.

School #144 - James Mosher Elementary School 5/11/73

I visited only one class at this school as Mrs. Henderson refused to allow an observation. The class was Mrs. Dugger's first grade. She was having a lesson about Drugs. She had the children gathered around her and a table which contained a display of various drug bottles.

She began by asking questions regarding drugs: Where do we get drugs? (the vocabulary words were pharmacy, drugstore and prescription) What kinds of drugs can you get without a prescription? With a prescription? Why you shouldn't take other peoples medicine.

There were pictures of health occupations on the board. Mrs. Dugger then read a book to the group called "How Hospitals Help You". It talked about the workers in the hospital. As she read she asked questions about the people in the book (why do they do what they do?)

Then she asked the group questions about doctors, nurses, and pharmacists. (About their duties and responsibilities, training and pay) They compared those three careers. As a review they listed things they learned about each on the board:

The Pharmacist- He makes medicine, He fills prescriptions

The Doctor- He gives needles, He gives medicine

The Nurse- She feeds you if you are sick, She takes your temperature

Finally they class played a guessing game in which students pantomimed one of the three careers under discussion and the class guessed who they were.

There were a few self awareness pictures and self descriptions around the room and some "What I want to be" stories.

**APPENDIX C**

**Elementary Teacher Progress Reports  
(Prepared by Project Staff)**

PROGRESS REPORTS GIVEN  
by  
PROJECT ELEMENTARY SCHOOL TEACHERS  
in  
BALTIMORE CITY

Occasion of Second Workshop  
Experience, January 17, 18, 19  
1973

A Component of  
The Maryland Career Development Project  
Maryland State Department of Education  
Box 8717, Friendship International Airport  
Baltimore, Maryland 21240  
P-75

## CAREER AWARENESS

School #64  
1/18/73

The following activities have been carried out by the Career Awareness Team and teachers of school #64:

- The first staff meeting to aid the team in motivating the staff to participate in a workshop was held on November 6, 1972. Mrs. Allen was present at this meeting to talk with the teachers.
- On November 20, 1972 the faculty workshop was held from 2:40-4:00 with Mrs. Allen in attendance.
- \*\*The Purpose of the workshop was: "Workshop participants will be able to fuse into the existing curriculum a continuum of activities designed to enable students to develop a positive self-image, articulate goals for themselves and an awareness of the diversity of occupations in which people engage."
- \*\*This workshop included an activity work session in which teachers at various grade levels worked in various subject areas to fuse career education concepts into the accepted objectives for each area. Folders were distributed that contained all the materials received at the workshop held at Lake Clifton and a suggested or sample unit on the field of work was also included.
- A professional book was purchased by the school for the faculty's use as a reference: Career Education, What It Is and How To Do It, by Hoyt, Evans, Mackin, Mangum.
- Mrs. Doris Collins (Grade 5) invited Mr. Bob Cheeks, Director of Manpower Resources in the Mayor's office, to talk with the children
- Mrs. Carole Harris invited Mr. Tommy Harris, a salesman at Fox Chevrolet (Security Blvd.) to talk with the children about his job.
- Impressive bulletin boards have been created in the following rooms: Mrs. Beard, Mrs. Mattison, Mrs. Collins, Mrs. Harris, Mrs. Westmoreland, and Mrs. Byers.
- Mr. Randall Krum, music teacher, has taken students to Morgan State College to hear a recital, visited with students, and discussed career opportunities related to music. He has also taken students to the Lyric and to Peabody.
- Mrs. Myers, art teacher, has worked with Mrs. Byers' class on "What Will I Be?" (cut and paste)
- Letters were sent home to parents concerning the jobs they have. The response was great.

Submitted by:  
Loretta Byers, Chairman  
Margaret Beard  
Felicidoll Mattison  
Gayle Westmoreland  
Gertrude Faber, Curriculum Coordinator

## CAREER EDUCATION AT SCHOOL #35

As a follow-up to the October Workshop, a Professional Study faculty meeting was held on the first Monday in November. Mrs. Audrey Allen explained the purposes and objectives of Career Education. A brief report was given by one of the participants about our activities during the workshop. Two other participants shared activities which they had done with their pupils during the past school year.

It was suggested that a meeting be held with the grade level chairmen and the exact procedure for incorporating the career education concept into the curriculum would be explained by Mrs. Allen and the school team.

As an outgrowth of this meeting, grade level meetings were scheduled. The teachers on each grade level were released from their classes and mini-workshops were set up. During these workshop sessions, the teachers wrote career education activities for all areas of the curriculum.

Although many programs are being initiated in the school this year, a number of innovative, creative activities involving career education are being executed.

###CAREER EDUCATION###

1. Children have made individual booklets on jobs.
2. Constructed a job learning station.
3. Sent two letters to parents about their jobs.
4. Children have filled out an application for job form.
5. Listed reasons for work.
6. Compiled a vocabulary of job terms and their meanings.
7. Did an actual assembly line task for the school secretary.
8. One group has written up the workers they read about in their reader.
9. One group has listed the traits of two great men from their reader (Benjamin Banniker, Dr. King).
10. Made sociograms about themselves.
11. Discussed and analyzed the concept theme.
12. Had children bring in materials related to their parents jobs.

The Music Department of #35 organized a choir. It was decided to have uniforms for the choir. Material was bought. The 4th grade teacher who is a good seamstress assisted the choir members in cutting out and making their skirts. In the 6th grade one teacher taught measurement, which enabled the children to measure their material.

As a follow up to new arithmetic skills.

Activity:

Employment Office

Objectives:

1. To screen applicants for various classroom jobs.
2. To hire and fire according to job record.
3. To evaluate employees' work.
4. To post weekly the job schedule.

Procedure:

1. The teacher hires four responsible children to act as employment officers.
2. The teacher runs off duplicated copies of application forms.
3. Children who are interested in the job will apply and be interviewed.
4. Employment officers keep a record of who is hired weekly or monthly on a record sheet which has been run off by the teacher.
5. Employment officers post the schedule weekly.
6. They give some kind of evaluation mark for each employee at the end of each week. They keep this record in a folder.
7. They discuss with employees their progress or lack of it.
8. The teacher keeps a check on the employment officers and evaluates them.

Materials:

Folders, duplicated sheets of applications, duplicated sheets of Weekly Work Schedule.

## CAREER EDUCATION ACTIVITIES

1. In the process of making a survey of the business in our local school community so that they may be an important part of our resource file on careers.
2. Mrs. Allen spoke to our faculty as a total group on the important concepts of career education. We plan to follow this meeting with mini-workshops for any interested members of the faculty.

3. We are maintaining a parent resource file through the use of the letters sent home. Also we are planning a tea for the parents to speak with them about the vital role they can play in career education.
4. Some of our pupils have been interviewing different workers within the school building. This involves preparing questions, the interview itself, and reporting back to the class. The tape recorder has been a valuable aid with the interviews.
5. Another activity - some of our 4th and 6th grade pupils are participating in the Dental Assistant Program. During Dental Health Week, these boys and girls will be dental assistants working with early admissions, kindergarten, and first graders. This program is being conducted by Dr. Balise of the Community Pediatrics Center on Redwood Street. One of our pupils will represent our school on a television program on WMAR Television at 1:30 PM on Sunday, January 22, 1973.

CAREER EDUCATION ACTIVITY SHEET

School #132  
Melvina Byrd  
Ollie Smith

The members of our team at School #132 are trying to help pupils develop a positive self-concept and a greater degree of self-understanding. We approached this objective through the new Social Studies Program centered around the theme - "Who Am I? Group Behaviour - Individuality and Conformity."

We used these sample questions, "What do I know about myself?" and "Do I look like other boys or girls?", to begin an understanding of each individual's appearance, physical and racial group. Pupils used mirrors to describe their reflections and draw self-portraits. We were able to write two sentences about appearance and racial background. We discussed feelings about self (happy, sad, angry, excited, etc.), abilities of one's self (What I can do best, What I cannot do well and Things I would like to do). Each pupil made an individual booklet entitled "As I See Myself" which contained drawings and sentences about one's self.

Pupils discussed the role of each member of the family - how we felt about each member, how each member reacted in times of anger, worry, happiness, sadness and feelings of excitement. We started a family album in the class and plan to add additional pictures throughout the school year.

We have done a lot of role playing in the classroom concerning the feelings of pupils in our class, feelings of family members in specific situations and ways we can improve or eliminate specific feelings.

Pictures from magazines, booklets and pictures from AV Center were assembled on the bulletin board and charts describing or showing feelings for others.

Pupils read stories about different feelings and dramatize some of these stories. We allowed the pupils to investigate many books to find out the adults' responsibilities in the home and the children's responsibilities in the home. We also used the inquiry approach in which pupils divided into groups to discuss and report on ways families help their members.

We used the film, The Blue Dashiki, to develop the understanding that you can earn money by doing work for others in the community to obtain the material things you desire. We discussed the types of work young children can do in the immediate neighborhood to secure small items for themselves or family members. We made a survey of the types of businesses in our school community and the skills needed to work in the grocery store, gas station, and delivering papers after school. We are planning to visit many stores and businesses within our school neighborhood to become acquainted with the world of work.

## CAREER EDUCATION

Grade 6  
School #60  
Mayess Craig

1. Solicit jobs from office for class to do as learning activities.
2. Extend the idea of making or filling out applications for all school jobs where necessary (possible).
3. Set up representatives for city jobs - make up a Constitution which will include duties and salaries.
4. Teach the skill of filling out applications to all boys and girls.
5. Interviews on tape which can be shared with many classes rather than calling in the people.
6. Isolate jobs in a particular industry.
7. Pupils select a job they would like and do extensive research on their own through guidance - at the end of research let pupil decide if he or she (still) feels that they possess the qualifications needed for the job, or if they still want the job.
8. On-the-spot interviews for pupils on various jobs in areas close to them.

### ACTIVITIES RELATED TO CAREER AWARENESS

1. Class began a concentrated unit entitled "Choosing a Career" in September of 1972. Each pupil selected a job of his interest. Jobs were listed on a board and each pupil told what he knew, if anything about his choice. Extensive research grew out of this which led to role playing, writing experiences, and other related activities.
  - A. Learning station titled "Speak Out" - Each pupil wrote three questions on his concerns of any job. Class could at spare time or assigned time choose one question to which he could answer intelligently, from knowledge, in a good paragraph - or he could do research on a particular question of his interest.
  - B. A big Thanksgiving dinner was held in which pupils were made aware of the various jobs involved. Mathematics was brought in under the job of the cook in the preparation of food. Other job areas were the waiters, waitresses, menu makers, etc. (buying materials and food needed).
  - C. Bulletin board was planned and developed by pupils which changed constantly with pictures and reports on job opportunities as well as job interests, meaning jobs not commonly known to pupils.

- D. Songs were learned which related to career development and some original songs to familiar tunes were written.
- E. Pictures were collected from magazines and newspaper illustrating various jobs. From this, pupils wrote original stories using factual information discovered or learned.
- F. From the gathering of information, an original play was written which will be "put on" as a school program to encourage similar activities related to careers throughout the entire school.

CAREER EDUCATION ACTIVITIES

Faculty

Viewed film from Maryland State Department - worked on a team to incorporate CE concepts into Science, Social Studies.

Parents

1. Introduced idea in a parent's meeting.
2. Sent letters by the School-Home Liaison Worker; S-HLW contacted Model Cities as to ways they can be a resource.
3. Began a file of occupations.

Children - Rode to Zoo

Walked to fire station, Lafayette Market, Took pictures

Bought and made Jello to list work involved

Viewed film "The Dairy Farmer".

Listened to zoo worker, member of Baltimore Zoological Society.

Listed careers related to animals. Talked to Officer Joe, Officer Friendly, nurse, teacher's aide. Listed after - school work - emptying trash, wash dishes, etc.

1. A visit to a dental laboratory was made. Students became aware of jobs in the field of dentistry. They saw an impression being made. The tools the technician used were explained. The technician described his duties and talked about other jobs in his field.
2. Joseph Burris visited a class to talk about his hobby which was wood carving. He showed the tools he used and he demonstrated how to make objects from wood. He also talked about how a hobby can sometimes become one's life work.
3. A class toured the city to observe the different factories and industries. Pupils observed construction going on.
4. Intermediate grades have involved Career Awareness in the science units "The Solar System" and "The Earth Inside and Out" Careers mentioned were
  - \*geologists
  - \*geographers
  - \*oceanographers
  - \*astronauts
  - \*chemists
  - \*technicians (many kinds)

\*The discussion centered around the relationship of their work to the environment.

5. The center of interest in an intermediate language arts program was "Writing Longer Reports" about careers as:
  - teachers
  - merchants
  - salesmen
  - musicians
  - astronauts - preparing food for the
  - astronauts = dietitians
6. Librarian stresses careers when teaching biographies. She stresses also how they arrived at their final achievement in life.

Activities engaged in by grades one through three

1. Have children fill in application for classroom jobs. Emphasizing, with children, importance of being able to fill out applications.
2. Use real objects or pictures of tools associated with specific jobs, such as: menu-waiters, letter - postman,
3. Discuss the baby sitter. Play role of baby sitter. Use poem "Our baby sitter" Learning Time Through Language Experiences, Louise Bender Scott
4. Discuss the meter reader, use poem "The Meter Reader", above reference
5. Teach or read poems from February, 1970, issue of Instructor "Everyone Great" "Occupation Builder", "T.V. Repairman" "Fruit Picker" "The Conjuror" and others.
6. List parents' occupations. Have children illustrate and write stories about these occupations.

Possible activities

1. Collect library books for young children

A Boat for Peppie - Leo Palite  
Benji Goes Into Business - Martin  
Country Garage - Beion  
Curious George Takes A Job - H. A. Rey  
Families, What They Do All Day - Pruner  
Dear Mr. Brown - Zion  
Johnny The Clockmaker - Ardizzone  
Mike Mulligan and His Steam Shovel - Burton  
Puff - Wondreska  
Skipper John's Cook - Brown  
So Long Finds A Way - Behrens  
The Little Fisherman - Brown  
The Plant Sitter - Zion  
Wake Up Farm - Tresselt  
While Susie Sleeps - Schneider

2. Develop the idea of what's behind a quart of milk or how food gets from the farm to the table.
3. Develop a bulletin board using pictures of occupations that influence our lives.
4. Role playing in primary city, build various stores, homes, etc.
5. Make hats. Play roles of various workers. Discuss shapes of hats and their significance in the job.
6. Economics: Discuss supply and demand, income, division of labor, etc.

CAREER EDUCATION ACTIVITIES

With teachers:

Talked about the scope of Career Education  
Viewed the film  
Worked in teams to incorporate C.E. concepts in Science units.

With parents:

Introduced the idea of Career Education  
Utilized the Parent Liaison Worker to begin a file of careers represented by our parents, to tap community resources, and to explore relatives of the staff.

With Children:

Grades Kgn., 1 and 2  
Discussed meaning of work  
Talked about father's work  
Toured School and school neighborhood noting workers (construction workers, crossing guard, store managers, etc)

Visited fire department during Fire Protection Week and learned of varied jobs including the chief's.

Toured Lafayette Market to make purchases for a party (Halloween) and to photograph workers on their jobs. Noted businesses on the avenue. (One is owned by a classmate's grandmother.)

Discussed work of policemen and compared their jobs to the special job of Officer Friendly.

Researched careers related to animals using pictures, books, films and interviews (Mr. Beall of Baltimore Zoological Society will be in on 12/20)

Visited the zoo to view animals and animal-related careers.

Saw the film "The Diary Farmer" and discussed work related to animals.

- I Pupils listed definitions of work. Wrote synonyms on tagboard and make bulletin boards showing definitions and various types of work.
- II Pupils viewed film strips and movies of work done by policeman and firemen. Used role playing to point out some of the things a policeman or fireman has to do.
- III Talked with Mr. Martin of the Fire Department and learned about duties of a fire inspector as well as regular fireman.
- IV Pupils listed occupations they are interested in. Wrote letters to get information from government about those occupations. Received pamphlets and follow-up letters about occupations. Wrote letters to set up interviews with school personnel - janitor, nurse, school secretary, librarian, teacher, principal, teacher's aide, dietitian.
- V Pupils made list of questions to ask during interviews.
- VI Pupils shared tapes with first grade class and answered questions.
- VII Pupils made a booklet which includes picture and outline of jobs they are interested in.

Outline included:

- I. Job Duties
- II. Working Conditions
- III. Training
- IV. Related Jobs

## APPENDIX D

### Instruments Used in the Evaluation

1. Self-awareness - Primary
2. Self-awareness - Intermediate
3. Self-awareness - Teacher form
4. Career-awareness - Primary
5. Career-awareness - Intermediate
6. Employers' Rating Card

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\* Some of the brief instruments used to survey workshop attendees are included in the text and are not repeated here.

## 1. Self-awareness - Primary

## INSTRUCTIONS FOR THE TEACHER

The accompanying materials are part of an assessment of the "self-awareness" of your students in connection with the ongoing Maryland Career Development Project. The Instrument is to be given on the date indicated by your Administrator.

There are two parts to this instrument. Part one is a self-awareness exercise to be answered by the students about themselves. On the second (teacher) part we are asking you to give your impressions of the students on the same dimensions. The variable to be measured is the difference between the two sets of responses. We wish to emphasize that this information will never be used against the child in any way - will not be a part of his permanent record; and indeed will never be reported by name. The only point of interest is how accurately he pictures himself as compared to the observations of others. Does he see himself in the same way that others (in this case, you) see him. Thus, your responses about the students must be done without the knowledge of the answers given by the students.

It is important that you emphasize to the students that this is not a test and that there are no right or wrong answers. What matters is that they try their best to give their true impressions about themselves. Also, all papers must have the students' names clearly written so that a comparison of the two sets of responses can be made.

The instructions for the actual administration are on the following page. It may be necessary to go over these instructions with the class several times until you are certain that the directions are understood.

The student response sheets and your response sheets will be collected from you at a time to be announced to you by your Administrator.

THANK YOU FOR YOUR COOPERATION.

## INSTRUCTIONS FOR THE TEACHER

The accompanying materials are part of an assessment of the "career-awareness" of your students in connection with the ongoing Maryland Career Development Project. The Instrument is to be given on the date indicated by your Administrator.

This is a career-awareness exercise to be answered by the students. It is important that you emphasize to the students that while there may not appear to be completely right or wrong answers that what matters is that they give the best answers they can based on their impressions about the workers. Also, all papers must have the students' names clearly written. Each group of papers should be clearly labeled with the teachers' name.

It may be necessary to go over these instructions with the class several times until you are certain that the directions are understood.

The student response sheets will be collected from you at a time to be announced to you by your Administrator.

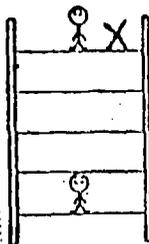
The instructions for the actual administration follow.

THANK YOU FOR YOUR COOPERATION.

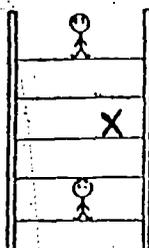
Self-Awareness

Primary:

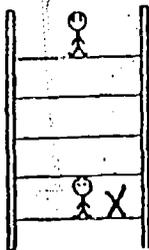
Boys and Girls, we are going to play a choosing game. I am going to give you two words, and you are going to choose which word tells how you feel about yourself. You mark an X on your sheet on the ladder to show how well the words fit you. Look at this example on the board - (Teacher uses Young/Old and illustrates at board for 3 conditions.) The boy on the top is very young, the person on the bottom is very old. You are to make a mark where you are - if you are very young you might make a mark here:



If you are not very young but not very old you might put a mark here:



If you were very old you might put a mark here:

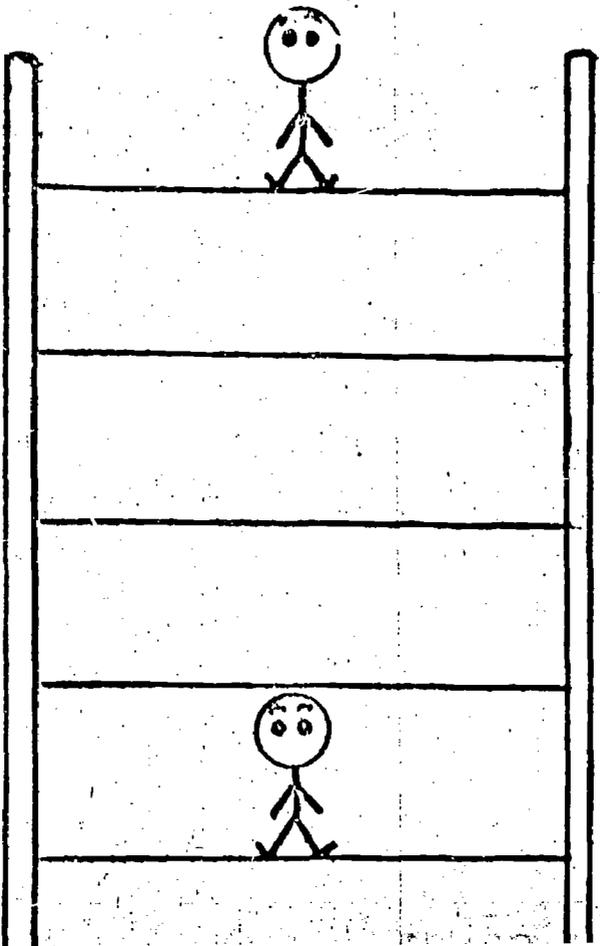
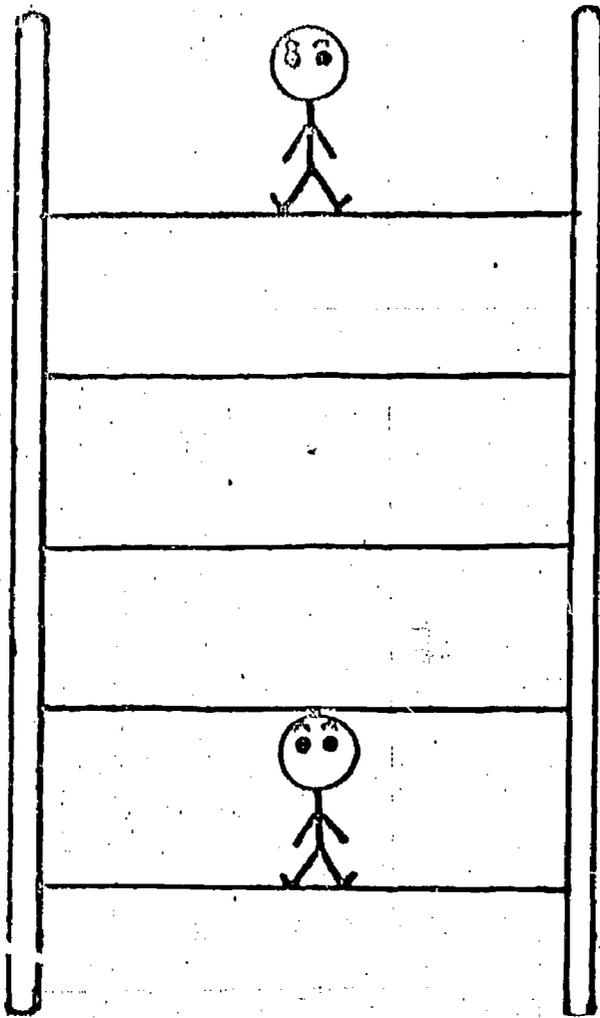


Answer questions.

Now take your pink sheet and look at the top of the page - hold up the sheet (check on this). You see two figures with a ladder in between. At the top of the ladder is "Big". At the bottom is "Little". Where are you on the ladder? Mark an X to show where you are - what rung are you on between "Big" and "Little"? (Check around room to see if done correctly.)

Now look at the bottom part of the pink sheet - here is another ladder. The top of this ladder is "Quiet" and the bottom is "Noisy". Where are you on this ladder? Mark an X to show how close you are to "Quiet" or "Noisy". Put it on the rung that shows how you think about yourself.

(Repeat for other bipolar scales.)



WORD PAIRS TO BE READ TO THE CLASS

ABOUT YOURSELF:

1. Big / Little
2. Quiet / Noisy
3. Sick / Well
4. Sad / Happy
5. Good / Bad
6. Friendly / Unfriendly
7. Right / Wrong
8. Pay Attention / Not pay attention

DO YOU DO THINGS:

9. By yourself / With others
10. Outdoors / Indoors
11. That are easy / That are hard
12. Well in school / Not well in school



SPECIAL CURRICULUM AND GENERAL VOCATIONAL

NAME

SCHOOL

Skills and Work Habits

Personal Traits

Superior Good Fair Poor

Superior Good Fair Poor

Ability to follow directions		X		
Accuracy		X		
Arithmetic		X		
Communication		X		
Cooperation		X		
General aptitude			X	
Neatness		X		
Reading		X	X	
Responsibility			X	
Quantity of work		X		
Quality of work		X		

Appearance		X		
Attitude			X	
Courtesy		X		
Emotional stability				X
Getting along with others				X
Initiative				X
Interest in work				X
Leadership				X
Meeting people				X
Personal Hygiene		X		
Reliability		X		
Respect for authority				

General Rating

GOOD

General Rating

FAIR

Punctuality

FAIR

Employer's Signature

Attendance

POOR

Date

5-4-73

Comments:

STUDENT HAD PROBLEMS AT HOME THAT PREVENTS HER FROM DOING BETTER ON THE JOB FIELD IN SCHOOL.

349 91 0045

**Baltimore City Public Schools**  
**Division of Guidance and Placement**  
**JOB-ORIENTED PROGRAMS**

Student \_\_\_\_\_  
School \_\_\_\_\_  
Employed \_\_\_\_\_  
Address \_\_\_\_\_  
Employed from \_\_\_\_\_ 19 72 to \_\_\_\_\_ 19 \_\_\_\_\_  
Type of Business DM. PERS. SHOP  
Typical Tasks Performed SALES PERSON

To the EMPLOYER: Please check your reactions on the reverse side.

5.

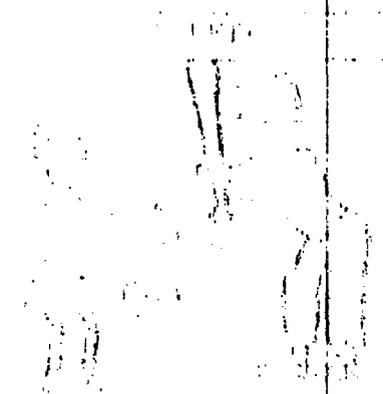
### What People Do

For each of the jobs on the top of the next page think about the description down the side. If the description fits MOST OF THE TIME or for MOST PEOPLE in that job, put an "X" in the space opposite the description and under that job. Work first with the first job, and think about each description in turn. If it fits most people in that job or fits people in that job most of the time, put the "X" in the space. Mark as many descriptions for a job as you think fit. Then go on to the next job and do the same thing.

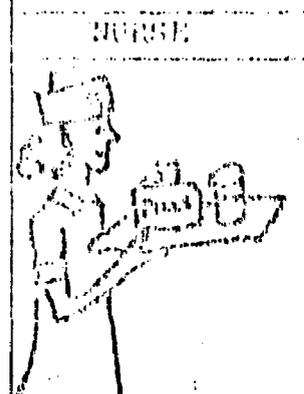
EXAMPLE:

	Farmer	Hotel Clerk	
Works indoors		X	
Works with animals	X		
Works with tools	X		

... a long stack of money



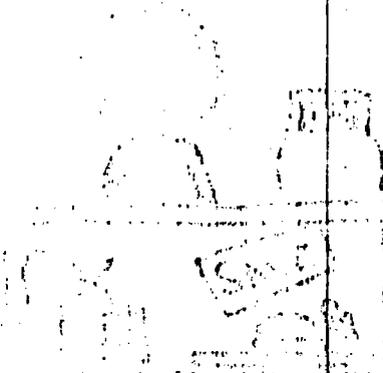
NURSE



MUSICIAN



TEACHER



NURSE

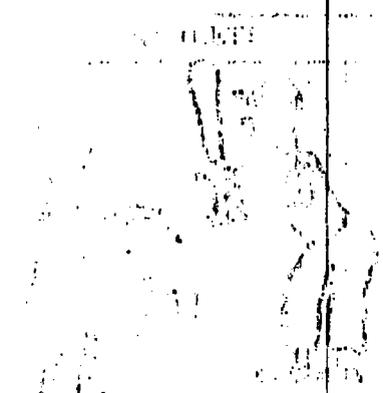


MUSICIAN

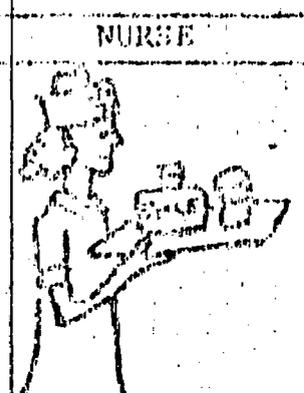


TEACHER

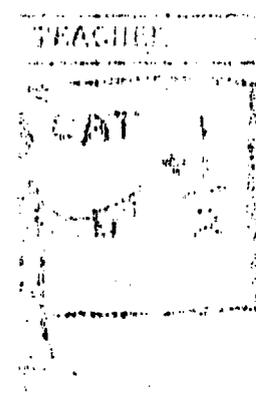
... the rest of the day sitting down



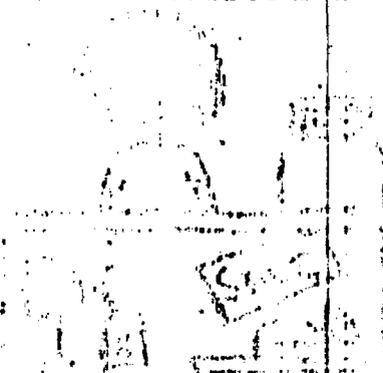
NURSE



MUSICIAN



TEACHER



NURSE



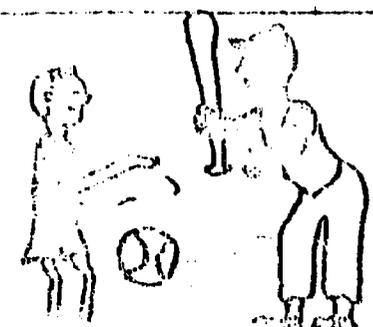
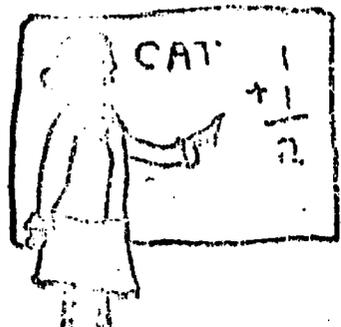
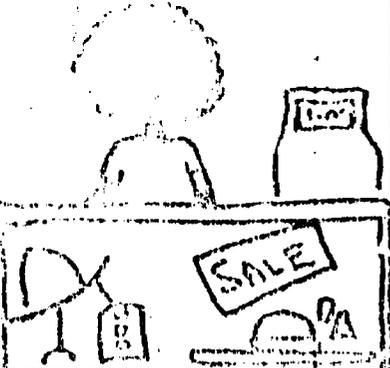
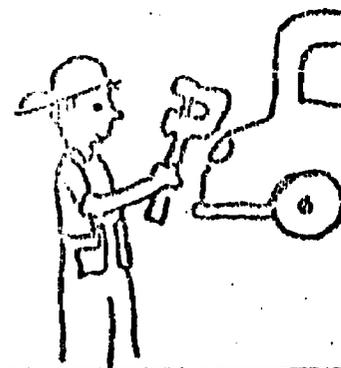
MUSICIAN



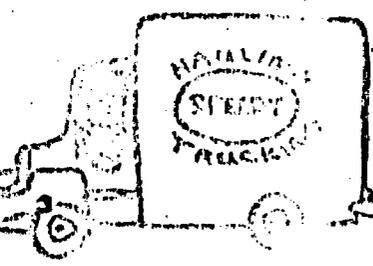
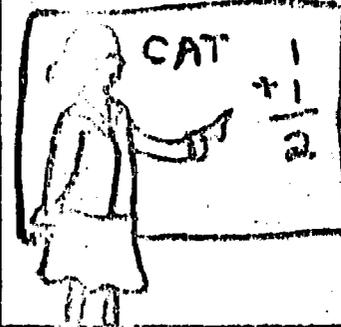
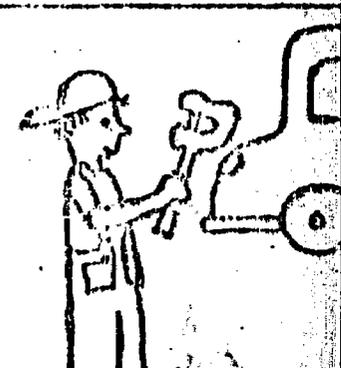
TEACHER

Name: \_\_\_\_\_

I help people.

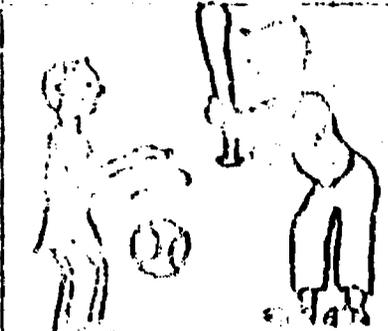
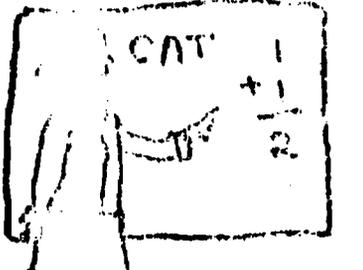
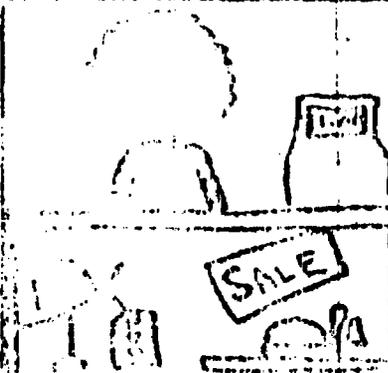
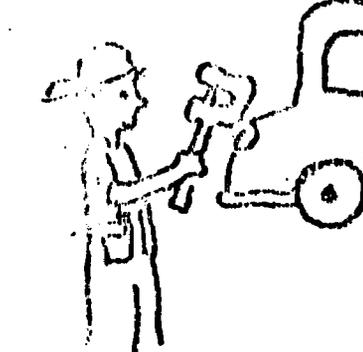
TRUCK DRIVER	ATHLETE	NURSE	TEACHER
			
CONSTRUCTION WORKER	STORE CLERK	MUSICIAN	MECHANIC
			

I work under uncomfortable conditions.  
(very hot, cold, dirty, etc.)

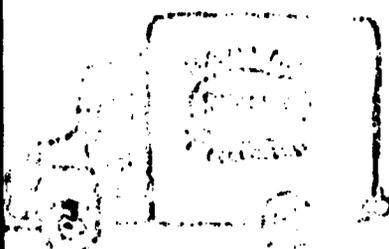
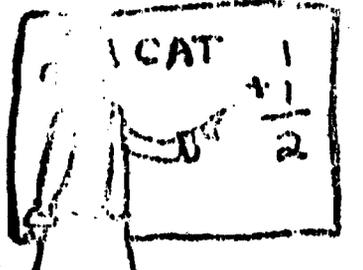
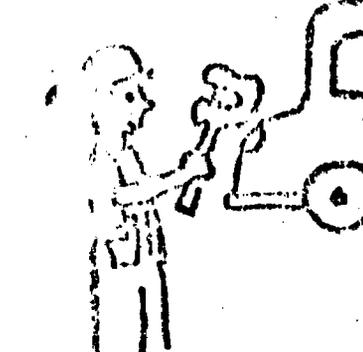
TRUCK DRIVER	ATHLETE	NURSE	TEACHER
			
CONSTRUCTION WORKER	STORE CLERK	MUSICIAN	MECHANIC
			

Wanted:

Tools To do my job.

 <p>TRUCK DRIVER</p>	 <p>ATHLETE</p>	 <p>NURSE</p>	 <p>TEACHER</p>
 <p>CONSTRUCTION WORKER</p>	 <p>STORE CLERK</p>	 <p>MUSICIAN</p>	 <p>MECHANIC</p>

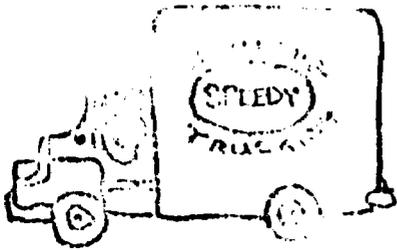
I need lots of people doing my job.

 <p>TRUCK DRIVER</p>	 <p>ATHLETE</p>	 <p>NURSE</p>	 <p>TEACHER</p>
 <p>CONSTRUCTION WORKER</p>	 <p>STORE CLERK</p>	 <p>MUSICIAN</p>	 <p>MECHANIC</p>

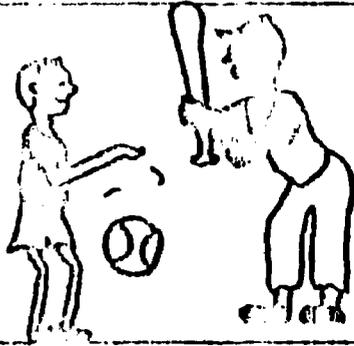
Name: \_\_\_\_\_

I make more money than most people.

TRUCK DRIVER



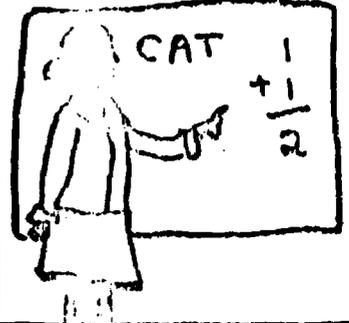
ATHLETE



NURSE



TEACHER



CONSTRUCTION WORKER



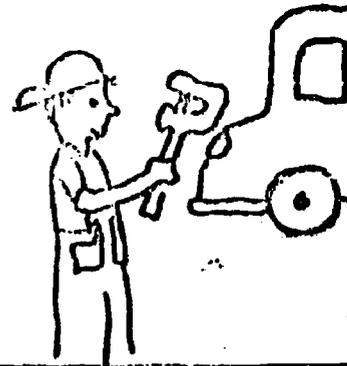
STORE CLERK



MUSICIAN

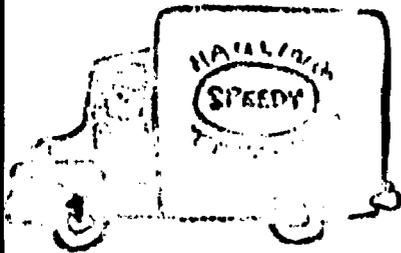


MECHANIC



It takes a long training period to do my job.

TRUCK DRIVER



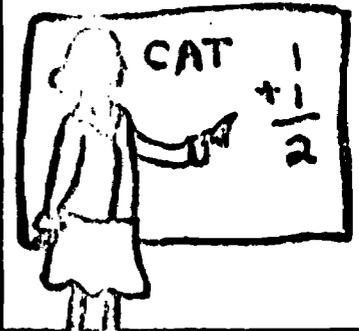
ATHLETE



NURSE



TEACHER



CONSTRUCTION WORKER



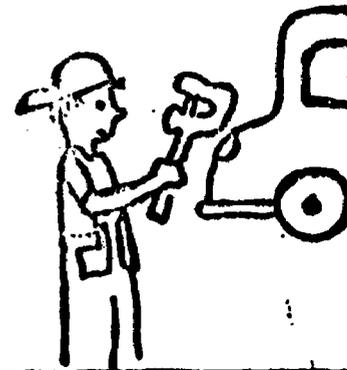
STORE CLERK



MUSICIAN



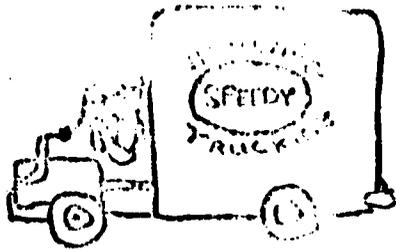
MECHANIC



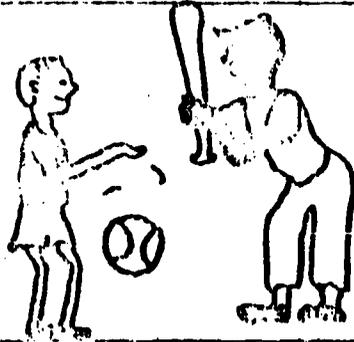
Name: \_\_\_\_\_

I need to be stronger than most people.

TRUCK DRIVER



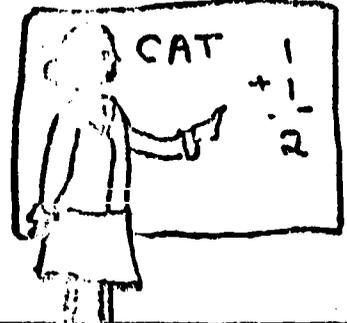
ATHLETE



NURSE



TEACHER



CONSTRUCTION WORKER



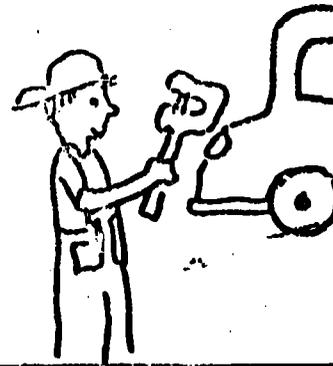
STORE CLERK



MUSICIAN



MECHANIC



I am out of work during some seasons.

TRUCK DRIVER



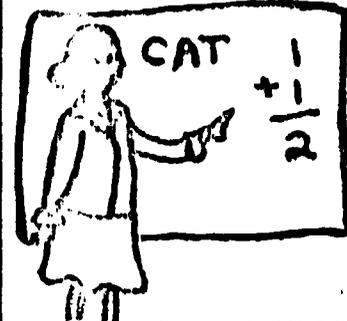
ATHLETE



NURSE



TEACHER



CONSTRUCTION WORKER



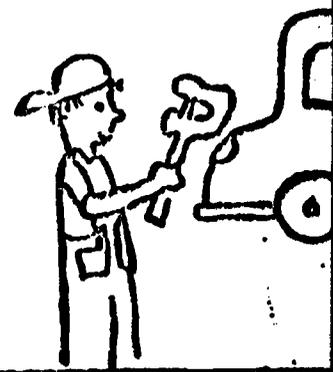
STORE CLERK



MUSICIAN



MECHANIC

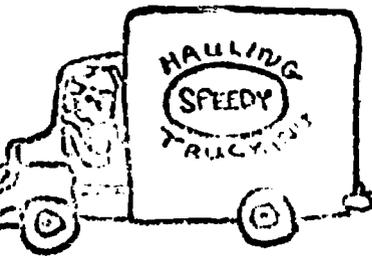
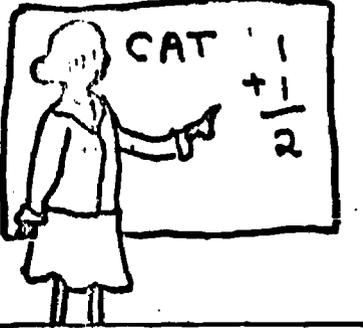
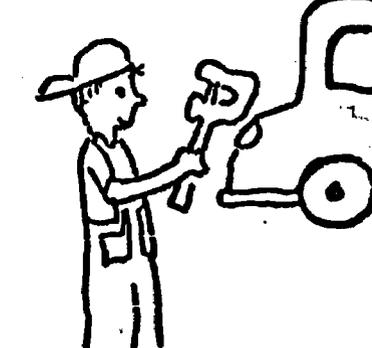


Name: \_\_\_\_\_

Example:

Mark an X over the workers who could say:

I work outdoors most of the time.

TRUCK DRIVER	ATHLETE	NURSE	TEACHER
			
CONSTRUCTION WORKER	STORE CLERK	MUSICIAN	MECHANIC
			

#### 4. Career-awareness - Primary

##### Career Awareness - Teacher Instructions - Primary:

Boys and Girls, we are going to play a game called "What people do". Look at the set of papers in front of you. You will see that there are eight pictures of different workers. These eight workers will be a part of the game all the way through. Let's look at them together to be sure we know who they are ... (Teacher introduces each of the pictures and discusses them until she is certain they are clear and recognizable to all.) At the top of each set of pictures is a sentence which describes certain workers. I will read each sentence and then you will decide which of the workers that the sentence fits. (By fits, I mean fits most of that kind of worker most of the time.) It may fit only one or more than one worker. Put a big X over those workers the sentence fits.

Let's look at the example on the first page. The sentence says - I work outdoors most of the time. Where would you put an X - who works outdoors most of the time? I would say that the truck driver and the athlete and the construction worker are the ones who do most of their work outdoors. The nurse works in a hospital, the teacher in a school, the clerk in a store, the musician on a stage and the mechanic in a garage.

Now if you did not put an X through "athlete", I can understand why. There is a picture of a basketball player there and he does play basketball indoors - but remember what I said - we want you to think about all athletes of all kinds. Now wouldn't you say that most athletes work out-of-doors? I think so. I want you to think about all of the workers and give the answers which seem best to you. There is a sentence at the top and bottom of each of the pages in the booklet in front of you. We will look at each sentence one by one beginning with the pink page. Let's turn to the pink page and begin.

5. / / / / / / / / / /  
SICK WELL
6. / / / / / / / / / /  
BEAUTIFUL UGLY
7. / / / / / / / / / /  
SAD HAPPY
8. / / / / / / / / / /  
GOOD BAD
9. / / / / / / / / / /  
KIND UNKIND
10. / / / / / / / / / /  
FRIENDLY UNFRIENDLY
11. / / / / / / / / / /  
CALM EXCITED
12. / / / / / / / / / /  
AFRAID UNAFRAID
13. / / / / / / / / / /  
ON TIME LATE
14. / / / / / / / / / /  
BUSY RESTING
15. / / / / / / / / / /  
DEPENDABLE NOT DEPENDABLE
16. / / / / / / / / / /  
RIGHT WRONG
17. / / / / / / / / / /  
DO WELL IN SCHOOL DONT'T DO WELL IN SCHOOL
18. / / / / / / / / / /  
PAY ATTENTION DON'T PAY ATTENTION

# ALL ABOUT THE THINGS YOU DO

Now think about the things you like to do. Put a mark on each of the lines below to tell about the things you like to do. If the words on the left describe the things you like to do, put a mark in one of the boxes to the left. If the words on the right tell better about the things you do, put the mark in one of the boxes on the right. If it is exactly in between, put your mark in the middle box. The better the words tell about the things you like to do, the closer to them your mark should be. Make only one mark on a line. Make a mark on every line.

19. / \_\_\_\_\_ /  
BY MYSELF WITH OTHERS

20. / \_\_\_\_\_ /  
OUTDOORS INDOORS

21. / \_\_\_\_\_ /  
CLEAN DIRTY

22. / \_\_\_\_\_ /  
WATCHED UNWATCHED

23. / \_\_\_\_\_ /  
SAFE DANGEROUS

24. / \_\_\_\_\_ /  
EASY HARD

25. / \_\_\_\_\_ /  
THINKING DOING